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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G06F 17/60, 17/00 — A1

(11) International Publication Number: **WO 99/66443**

(43) International Publication Date: 23 December 1999 (23.12.99)

(21) International Application Number: PCT/US99/13819

(22) International Filing Date: 18 June 1999 (18.06.99)

(30) Priority Data:
09/100,684 19 June 1998 (19.06.98) US

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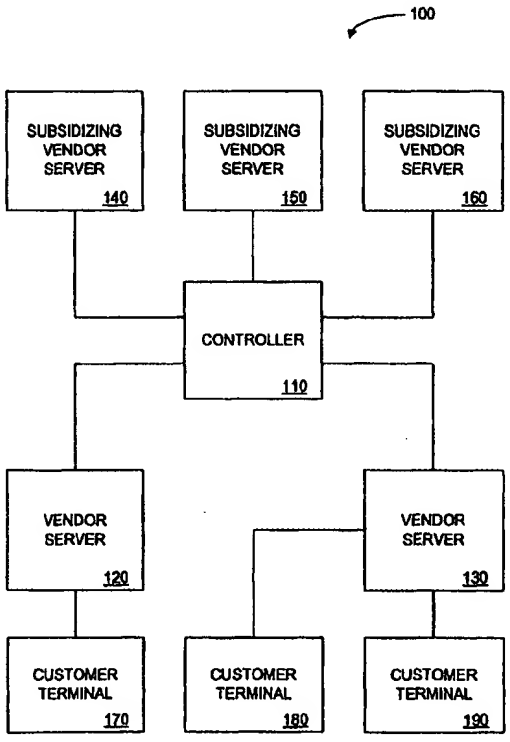
(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published**
*With international search report.*
*Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.*

(54) Title: METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL AUTHORITY

(57) Abstract

A controller (110) is in communication with a plurality of vendors (170, 180, 190) that are servicing customers, as well as with a plurality of "subsidizing" vendors (140, 150, 160) seeking access to those customers. The controller (110) receives from a first vendor an indication of one or more items that a customer is to purchase. In response, the controller (110) transmits, on behalf of a subsidizing vendor (140, 150, 160), an indication of an offer for a subsidy such as a reduction in the customer's purchase price. If the customer accepts the offer, the controller (110) provides an amount of funds from the subsidizing vendor to the first vendor. The controller (110) also facilitates a transaction between the customer and the subsidizing vendor (140, 150, 160). For example, the customer may be required to sign up for a service (e.g. credit card account service) that is provided by the subsidizing vendor (140, 150, 160).



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# METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL AUTHORITY

The present application is a continuation-in-part application of co-pending U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS DURING A TRANSACTION" to Jay S. Walker and Daniel E. Tedesco filed on December 23, 1998, which is a continuation-in-part application of co-pending U.S. patent application Serial No. 08/943,483 entitled "SYSTEM AND METHOD FOR FACILITATING ACCEPTANCE OF CONDITIONAL PURCHASE OFFERS (CPOs)" to Andrew S. Van Luchene, Daniel E. Tedesco, James A. Jorasch, Jay S. Walker and Thomas M. Sparico filed on October 3, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/923,683 entitled "CONDITIONAL PURCHASE OFFER (CPO) MANAGEMENT SYSTEM FOR PACKAGES" to Andrew S. Van Luchene, Daniel E. Tedesco, James A. Jorasch, Jay S. Walker and T. Scott Case filed September 4, 1997, which is a continuation-in-part of U.S. patent application Serial No. 08/889,319 entitled "CONDITIONAL PURCHASE OFFER MANAGEMENT SYSTEM" to Bruce Schneier, James A. Jorasch, Jay S. Walker and T. Scott Case filed July 8, 1997, which is a continuation-in-part of U.S. Patent No. 5,794,207 entitled "METHOD AND APPARATUS FOR A CRYPTOGRAPHICALLY ASSISTED COMMERCIAL NETWORK SYSTEM DESIGNED TO FACILITATE BUYER-DRIVEN CONDITIONAL PURCHASE OFFERS" issued to Bruce Schneier, James A. Jorasch and Jay S. Walker on August 11, 1998; and a continuation-in-part of co-pending U.S. patent application Serial No. 09/100,684 entitled "BILLING STATEMENT

CUSTOMER ACQUISITION SYSTEM" to Daniel E. Tedesco, James A. Jorasch and Jay S. Walker filed on June 19, 1998, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/982,149 entitled "METHOD AND APPARATUS FOR PRINTING A BILLING STATEMENT TO PROVIDE SUPPLEMENTARY PRODUCT SALES" to Jay S. Walker, Daniel E. Tedesco, Andrew S. Van Luchene and Dean P. Alderucci filed on December 1, 1997; and a continuation-in-part of co-pending U.S. patent application Serial No. 08/994,426 entitled :METHOD AND APPARATUS FOR PROVIDING SUPPLEMENTARY PRODUCT SALES TO A CUSTOMER AT A CUSTOMER TERMINAL" to Jay S. Walker, Andrew S. Van Luchene and Daniel E. Tedesco filed on December 19, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/920,116 entitled "METHOD AND SYSTEM FOR PROCESSING SUPPLEMENTARY PRODUCT SALES AT A POINT-OF-SALE TERMINAL" to Jay S. Walker, James A. Jorasch and Andrew S. Van Luchene filed on August 26, 1997, which is a continuation-in-part of co-pending U.S. patent application Serial No. 08/822,709 entitled "SYSTEM AND METHOD FOR PERFORMING LOTTERY TICKET TRANSACTIONS UTILIZING POINT-OF-SALE TERMINALS" to Jay S. Walker, James A. Jorasch and Sanjay K. Jindal filed on March 21, 1997, each of the foregoing applications incorporated herein by reference.

## FIELD OF THE INVENTION

The present invention relates to methods and apparatus for facilitating commerce.

BACKGROUND OF THE INVENTION

There is a great deal of competition among vendors to attract and retain customers. Even when a customer has browsed a vendor's inventory, he will not make a purchase if an item's price is greater than the amount the customer is willing to pay. One way to increase customer willingness to purchase is to provide discounts on items purchased. Unfortunately, vendors must use discounts sparingly, since reducing purchase prices likewise reduces margins and the reduced margins may not be offset by increased sales volume.

A vendor may also offer promotions to provide an incentive for customers to make purchases. For example, a vendor may offer a "buy one get one free" promotion whereby a purchase of an item yields the benefit of an additional item at no cost. Similarly, a vendor may provide a discount on a purchase in exchange for signing up for a credit card account provided by the vendor.

Promotions may also be provided among two or more vendors. For example, a first vendor may advertise that if a particular product is purchased, another product may be purchased from or given away by a second vendor.

The parent application of the present application, U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December 23, 1998, discloses a method and apparatus that permits a customer that is purchasing items from a first vendor to receive a benefit (e.g. a credit for the price of the items) from a second vendor. The present application provides further embodiments of this novel and beneficial invention.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a method and apparatus for facilitating commerce.

In accordance with the present invention, a controller is in communication with a plurality of vendors that are servicing customers, as well as with a plurality of "subsidizing" vendors seeking access to those customers. The controller receives from a first vendor server an indication of one or more items that a customer is to purchase. In response, the controller transmits, on behalf of a subsidizing vendor, an indication of an offer for a subsidy such as a reduction in the customer's purchase price.

If the customer accepts the offer, the controller provides, directly or indirectly, an amount of funds from the subsidizing vendor to the first vendor. The controller may retain a portion of the amount of funds as payment. The controller also facilitates a transaction between the customer and the subsidizing vendor. For example, the customer may be required to sign up for a service (e.g. credit card account service) that is provided by the subsidizing vendor. The controller may facilitate this transaction by providing a form for entry of customer information.

By having the controller manage such a system by acting between subsidizing vendors and vendors that are servicing customers, a vendor need only communicate with the controller, rather than a plurality of other vendors. Vendors likewise need only form one relationship with a central authority rather than with a plurality of other vendors. Furthermore, as new subsidizing vendors elect to participate, existing vendors automatically benefit from the new subsidies which may be possible.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic illustration of an apparatus for facilitating commerce in accordance with the present invention.

FIG. 2 is a schematic illustration of a controller of the apparatus of FIG. 1.

FIG. 3 is a schematic illustration of a vendor server of the apparatus of FIG. 1.

FIG. 4 is a representation of a customer database of the controller of FIG. 2.

FIG. 5 is a representation of a vendor database of the controller of FIG. 2.

FIG. 6 is a representation of a transaction database of the controller of FIG. 2.

FIG. 7 is a representation of a subsidizer database of the controller of FIG. 2.

FIG. 8 is a representation of an offer rules database of the controller of FIG. 2.

FIG. 9 is a representation of an offers database of the controller of FIG. 2.

FIG. 10 is a representation of a record of an offer summary database of the controller of FIG. 2.

FIG. 11 is a schematic illustration of an item database of the vendor server of FIG. 3.

FIG. 12 is a flow chart illustrating an embodiment of a method, performed by a vendor server, for providing an offer for a benefit.

FIG. 13 is a flow chart illustrating an embodiment of a method, performed by the controller of FIG. 2, for providing an offer for a benefit.

FIG. 14 is an exemplary web page.

FIG. 15 is another exemplary web page.

FIG. 16 is a flow diagram illustrating the transfer of funds among parties in accordance with the present invention.

FIGS. 17A and 17B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIGS. 18A and 18B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIG. 19 is a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIGS. 20A and 20B are a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

FIG. 21 is a table illustrating data used when a subsidy amount is applied over time.

FIG. 22 is a flow chart illustrating another embodiment of a method for providing an offer for a benefit to a customer.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Applicants have recognized that the acquisition budgets of various venders may be advantageously used to facilitate commerce. A customer that purchases items from a first vendor may be paid, directly or indirectly, by a second vendor, so that the customer pays a reduced price, perhaps nothing at all, for his desired items. In exchange, the customer participates or agrees to participate in a transaction with the second vendor. As used herein, this "transaction" may be any interaction with the second vendor. For example, the customer may be required to sign up for a service that is provided by the second vendor. Since many service providers are willing to pay significant amounts of money (e.g. often $50 to $200) to acquire a new customer, the ability to acquire a customer by essentially "intervening" in a sale between others can

benefit all parties involved. The customer is benefited by the reduced price of his items, the first vendor is benefited by the increased sales and customer satisfaction that such an arrangement would bring, and the second vendor is benefited by the additional transaction, particularly the acquisition of a new customer in one embodiment.

In addition, applicants have also recognized that there are benefits to having a controller manage such a system by acting between subsidizing vendors and vendors that are servicing customers. For example, a vendor need only communicate with the controller, rather than with a plurality of other vendors. Vendors likewise need only form one relationship with a central authority rather than with a plurality of other vendors. Furthermore, as new subsidizing vendors elect to participate, existing vendors automatically benefit from the new subsidies which may be possible.

The controller of the present invention can also track customer information derived from several vendors, allowing subsidies to be better targeted to customers. The controller can also act to reduce or eliminate customer manipulation of subsidy offers. For example, the controller can identify a customer that attempts to merely collect subsidies by agreeing to participate in contradictory transactions, such as simultaneously agreeing to switch to two telephone service providers.

Referring to FIG. 1, an apparatus 100 includes a controller 110 that is in communication with vendor servers 120 and 130. The controller 110 and the vendor servers 120 and 130 may comprise computers, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of vendor servers may be in communication with the controller 110.

Each of the vendor servers 120 and 130 may be a "web server" of a vendor (e.g. a retail seller). A vendor server could then generate a web page that may be accessed via the World Wide Web and allow purchases from the vendor to be made in a manner known in the art. Alternatively, each of the vendor servers 120 and 130 may be a computer involved in operating a physical store. Such a computer, for example a point of sale (POS) server, would perform such tasks as inventory management and item pricing.

The controller 110 is also in communication with subsidizing vendor servers 140, 150 and 160. Each of the subsidizing vendor servers 140, 150 and 160 may comprise computers, such as those based on the Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of subsidizing vendor servers may be in communication with the controller 110.

Each of the subsidizing vendor servers 140, 150 and 160 may be a "web server" of a vendor. A subsidizing vendor server could then generate a web page that may be accessed via the World Wide Web and allow transactions with the subsidizing vendor in a manner known in the art. Alternatively, each of the subsidizing vendor servers 140, 150 and 160 may be a computer involved in operating a physical store. Such a computer would perform such tasks as inventory management and item pricing.

A vendor server may be in communication with one or more customer terminals that transmit data on a customer transaction (e.g. a purchase). The vendor server 120 is in communication with a customer terminal 170, and the vendor server 130 is in communication with customer terminals 180 and 190. Any or all of the customer terminals 170, 180 and 190 may be point of sale (POS) terminals, such as the

NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International Business Machines. As is known in the art, POS terminals perform such processes as calculating the total price of a purchase (goods or services) and calculating the amount of change due to a customer. POS terminals may furthermore track purchases made and adjust databases of inventory accordingly.

In another embodiment, any or all of the customer terminals 170, 180 and 190 may be computers, such as those based on the Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Such computers are able to appropriately access a web page to communicate with a vendor server in a manner that is known to those skilled in the art.

In still other embodiments, any or all of the customer terminals 170, 180 and 190 may be telephones, vending machines, other devices that can receive payment from customers in exchange for providing goods or services, pagers or palmtop computers such as personal digital assistants (PDAs).

Referring to FIG. 2, the controller 110 comprises a processor 200, such as the Intel® Pentium® microprocessor. The processor 200 is in communication with a data storage device 210, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 210 may comprise one or more of a ROM, RAM and hard disk. The processor 200 and the data storage device 210 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the controller 110 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 210 stores a program 220 for controlling the processor 200. The processor 200 performs instructions of the program 220, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 220 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 200 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 210 also stores (i) a customer database 230, (ii) a vendor database 240, (iii) a transaction database 250, (iv) a subsidizer database 260, (v) an offer rules database 270, (vi) an offers database 280 and (vii) an offer summary database 290. The databases 230, 240, 250, 260, 270, 280 and 290 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 3, a vendor server 300 is illustrative of the vendor servers 120 and 130 (FIG. 1). The vendor server comprises a processor 302, such as the Intel® Pentium® microprocessor, which is in communication with a customer terminal 315 and the controller 110. The processor 302 is also in communication with a data storage device 310, such as an appropriate combination of magnetic, optical

and/or semiconductor memory. For example, the data storage device 310 may comprise one or more of a ROM, RAM and hard disk. The processor 302 and the data storage device 310 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the vendor server 300 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 310 stores a program 320 for controlling the processor 302. The processor 302 performs instructions of the program 320, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 320 furthermore includes program elements that may be necessary, such as an operating system and "device drivers" for allowing the processor 302 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 310 also stores (i) a customer database 330, (ii) an item database 340, and (iii) a transaction database 350. The customer database 330 and the transaction database 350 of the vendor server 300 may be similar or identical to the customer database 230 and transaction database 250 of the controller 110. For example, the controller 110 may store data that is derived from the vendor server 300, and vice versa. If each vendor server stores data on its own customers and its own transactions, the controller 110 could aggregate this data from each vendor server.

The databases 330, 340 and 350 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, a table 400 represents an embodiment of the customer database 230 (FIG. 2) and/or the customer database 330 (FIG. 3). The table 400 includes entries 402, 404, 406 and 408, each defining a customer that may purchase items from a vendor. Such information may be determined, for example, when a customer registers for a frequent shopper card. Those skilled in the art will understand that the table 400 may include any number of entries. The table 400 also defines fields for each of the entries 402, 404, 406 and 408. The fields specify (i) a customer identifier 420 that uniquely identifies the customer, (ii) a name 422 of the customer, (iii) a billing address 424 of the customer, (iv) credit card information 426 which may be used to render payment in purchasing the items, and (v) an electronic mail ("email") address 428 for communication with the customer.

Referring to FIG. 5, a table 500 represents an embodiment of the vendor database 240 (FIG. 2). The table 500 includes entries 502, 504, 506 and 508, each defining a vendor that services customers and may have those customers receive offers for subsidies. Such information may be determined when a vendor registers for participation in the subsidizing program described herein. Those skilled in the art will

understand that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504, 506 and 508. The fields specify (i) a vendor identifier 520 that uniquely identifies the vendor, (ii) a vendor name 522, (iii) a vendor email address 524 for communication with the vendor, and (iv) an amount owed 526 to the vendor (e.g. promised but unpaid subsidy amounts).

Referring to FIG. 6, a table 600 represents an embodiment of the transaction database 250 (FIG. 2) and/or the transaction database 350 (FIG. 3). The table 600 includes entries 602, 604 and 606, each defining a transaction with a vendor server. Typically, the transaction includes a purchase of items by a customer. Those skilled in the art will understand that the table 600 may include any number of entries. The table 600 also defines fields for each of the entries 602, 604 and 606. The fields specify (i) a transaction identifier 620 that uniquely identifies the transaction, (ii) a time 622 of the transaction, (iii) the items ordered 624, (iv) credit card information 626 that may define a credit card account that was charged to pay for the items purchased, (v) an amount charged 628 for the items, (vi) a delivery address 630 for the items, and (vii) a customer identifier 632 (if any) that identifies the customer that made the purchase. Other forms of payment may be used besides a credit card account. For example, debit accounts or "electronic cash" may be used to render payment.

Referring to FIG. 7, a table 700 represents an embodiment of the subsidizer database 260 (FIG. 2). The table 700 includes entries 702, 704 and 706, each defining a subsidizing vendor that may subsidize purchases. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 700 may include any number of entries. The table 700 also defines fields for each

of the entries 702, 704 and 706. The fields specify (i) a subsidizing vendor identifier 720 that uniquely identifies the subsidizing vendor, (ii) a name 722 of the subsidizing vendor, (iii) an account 724 used to pay for the subsidies, (iv) an amount owed 726 by the subsidizing vendor, and (v) a rank 728 used to prioritize subsidizing vendors and/or subsidies from those subsidizing vendors. The ranks may be established periodically (e.g. once per year) or substantially continuously based on various criteria. For example, the ranks may be adjusted dynamically based on the acceptance rates of offers from the subsidizing vendors and/or amount of funds the subsidizing vendors have provided in connection with their offers.

Referring to FIG. 8, a table 800 represents an embodiment of the offer rules database 270 (FIG. 2). The table 800 includes entries 802, 804, 806, 808 and 810, each defining an offer rule. When an offer rule is satisfied during a transaction, the vendor provides an offer for a specified benefit, such as a subsidy. Such information may be determined when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804, 806, 808 and 810. The fields specify (i) an offer rule identifier 820 that uniquely identifies the offer rule, (ii) a subsidizing vendor identifier 822 that uniquely identifies the subsidizing vendor, (iii) a subsidy amount 824, (iv) when the offer rule is effective 826 (i.e. when the offer rule is satisfied), and (v) an additional transaction 828 that is required of the customer in exchange for the subsidy. As described below, several types of transactions, such as additional purchases or initiating service agreements, may be required of the customer.

Referring to FIG. 9, a table 900 represents an embodiment of the offers database 280 (FIG. 2). The table 900 includes entries 902, 904, 906, 908 and 910, each defining an offer for a subsidy. The offer was provided to a customer during a transaction of the customer with the vendor. Those skilled in the art will understand that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906, 908 and 910. The fields specify (i) an offer identifier 920 that uniquely identifies the offer, (ii) a transaction identifier 922 that uniquely identifies the transaction during which the offer was provided, (iii) a subsidizing vendor identifier 924 that uniquely identifies the subsidizing vendor, (iv) an identifier of an offer rule 926 that was applied during the transaction, (v) a subsidy amount 928, (vi) a total price 930 that the customer would have to pay without the subsidy, (vii) a total price 932 that the customer would have to pay with the subsidy, and (viii) whether the offer was accepted 934. As described above with reference to FIG. 8, offer rules define specific subsidies. Thus, the identifier of an offer rule stored in field 926 may be used to determine a corresponding subsidy amount.

Referring to FIG. 10, a table 1000 represents a record of an embodiment of the offer summary database 290 (FIG. 2). The offer summary database 290 typically includes a plurality of records, each defining a summary of offers for subsidies that have been provided on behalf of a subsidizing vendor. The table 1000 includes a subsidizing vendor identifier 1002 that uniquely identifies the subsidizing vendor, a total number of offers provided 1004 on behalf of the subsidizing vendor, a total number of those offers that were accepted 1006, and a total amount 1008 of the subsidies due in connection with accepted offers.

The table 1000 also includes entries 1010 and 1012, each defining offers provided due to satisfaction of an offer rule of the subsidizing vendor. Those skilled in the art will understand that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1010 and 1012. The fields specify (i) an offer rule identifier 1020 that uniquely identifies the offer rule, (ii) a number 1022 of offers provided due to the offer rule, (iii) a number 1024 of these offers that were accepted, (iv) an amount 1026 of the subsidies due in connection with these accepted offers. If desirable, the information stored in the offer summary database 290 (FIG. 2) may be organized by the vendor through which the offer was provided. Such an embodiment would allow a comparison of the acceptance rate (number of offers accepted / number of offers provided) of offers at different vendors.

Referring to FIG. 11, a table 1100 represents an embodiment of the item database 340 (FIG. 3). The table 1100 includes entries 1102 and 1104, each defining an item sold via a vendor server. Those skilled in the art will understand that the table 1100 may include any number of entries. The table 1100 also defines fields for each of the entries 1102 and 1104. The fields specify (i) a item identifier 1120 that uniquely identifies the item, (ii) an item description 1122, (iii) an item price 1124 for which the item is typically sold, and (iv) an availability 1126 of the item which may be based on an inventory level of the item.

Referring to FIG. 12, a flow chart 1200 illustrates an embodiment of a method for providing an offer for a benefit (e.g. a reduced price) to a customer that is to purchase items from a vendor. In one embodiment, the illustrated method is performed by a vendor server after the customer has accessed a web page generated and/or controlled by the vendor server. In another embodiment, the illustrated method is

performed by a vendor server after a customer brings items he wishes to purchase to a POS terminal.

The vendor server receives an indication that the customer is to purchase items from the web site of the vendor (step 1202). For example, after a customer accesses a web site of the vendor, the customer may select one or more items to purchase, and "click" a button that indicates that the customer desires to purchase the selected items. The act of clicking could generate a signal that the vendor server interprets as an indication that the customer is to purchase the selected items. In another embodiment, the act of accessing the web site could generate a signal that the vendor server interprets as an indication that the customer is to purchase the selected items. In yet another embodiment, a bar code scanner reads bar codes on items the customer brings to a POS terminal. The bar code scanner then generates a signal that the vendor server interprets as an indication that the customer is to purchase the selected items. The item database 340 (FIG. 3) would provide relevant details about each indicated item. Those skilled in the art will understand still other types of appropriate indications.

The vendor server then transmits the indication of the items to the controller 110 (step 1204). In response, the controller transmits and the vendor server receives an indication of an offer for a subsidy from a subsidizing vendor (step 1206). This indication may include an indication of a subsidy amount. For example, referring again to FIG. 8, the field 824 specifies a subsidy amount for an offer rule, and such data could be included in the indication of an offer for a subsidy. The indication may also include an indication of a transaction the customer is required to perform in exchange

for receiving the subsidy amount. The field 828 (FIG. 8) specifies such a required transaction.

The vendor server provides the customer with an offer for the subsidy (step 1208). For example, the POS terminal may display a textual representation of the offer, which is read by the customer or read to the customer by a cashier. In another embodiment, the web page may display text describing the subsidy. The web page may be dynamically modified to include a button that, when clicked, indicates acceptance of an offer for a subsidy. Alternatively, the offer may be transmitted to the customer via email, telephone or other means.

A response to the offer is received (step 1210). For example, the customer or cashier may actuate a button that generates a representative signal for the POS terminal. In another embodiment, the customer may click a button on the web page or click on a hyperlink on the web page. If it is determined that the offer is not accepted (step 1212), then the transaction is processed conventionally (step 1214). For example, the items are to be purchased for the conventional total price, a credit card number is received and the corresponding credit card account is charged appropriately.

If it is determined that the offer is accepted (step 1212), then an indication of the acceptance is transmitted to the controller 110 (step 1216) and the customer is charged a reduced price for the items (step 1218). Charging a reduced price may comprise charging the conventional (i.e. unreduced) price followed by crediting the customer a discount amount. For example, if the items are normally sold for $25 (as determined by prices specified by the item database 340), then $25 is charged to a credit card account of the customer, and a discount amount (perhaps $25 as well) is credited to the credit card account.

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a method for providing an offer for a benefit to a customer. In one embodiment, the controller 110 (FIG. 1) performs the illustrated method after the customer has accessed a web page generated and/or controlled by the vendor server. In another embodiment, the controller 110 performs the illustrated method after a customer brings items he wishes to purchase to a POS terminal.

The controller 110 receives an indication that the customer is to purchase items from a first vendor (step 1302). For example, a customer may bring items to purchase to a POS terminal, at which point the items are scanned by a bar code scanner. The POS terminal in turn transmits an indication of the items to the vendor server, which in turn transmits the indication to the controller 110 (step 1204 of FIG. 12), which receives the indication. In another embodiment, after the customer accesses a web site, the customer may select one or more items to purchase, and "click" a button that indicates that the customer desires to purchase the selected items. The act of clicking could generate a signal that is transmitted via the vendor server to the controller 110. Alternatively, the customer terminal may include "client-side" software that detects various types of customer activity and in response generates signals and transmits the signals via the vendor server to the controller 110. The controller 110 interprets the signal as an indication that the customer is to purchase the selected items. In another embodiment, the act of accessing the web site could generate a signal that the controller 110 interprets as an indication that the customer is to purchase the selected items. Those skilled in the art will understand still other types of appropriate indications.

In response to the indication that the customer is to purchase items from the first vendor, the controller 110 transmits to the vendor server an indication of an offer for a subsidy from a second vendor (step 1304). The controller 110 may then create an entry in the offers database 280 (FIG. 2) to record the offer. In particular, the total price with subsidy may be calculated by subtracting the subsidy amount from the total price of the items. The controller 110 may also create an appropriate record of the offer summary database 290 (FIG. 2). The controller 110 subsequently receives an indication of the customer response (step 1306) from the vendor server. This response is also recorded in the appropriate entry of the offers database 280. If the customer did not accept the offer (step 1308), the transaction is processed conventionally (step 1310).

If the customer accepted the offer, the controller 110 provides funds to the first vendor (step 1312). As described below, the funds provided to the first vendor may equal or exceed the amount of reduction in price of the customer's purchase. The controller 110 may provide funds a short time after the offer is accepted (e.g. substantially immediately). Alternatively, the controller 110 may provide funds periodically (e.g. in accordance with a periodic remittance cycle). For example, the controller 110 may maintain a running balance of funds owed to various vendors. At the end of the month, the controller would transmit the aggregate amount to the appropriate vendor or vendors. The step of providing funds may comprise crediting an account corresponding to the first vendor. Alternatively, providing funds may comprise initiating a transfer of funds (e.g. a "wire transfer") to an account corresponding to the first vendor.

In another embodiment described in the parent application, U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR

FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS DURING A TRANSACTION", filed on December 23, 1998, the controller 110 provides funds to the customer by crediting an account of the customer.

In exchange for the subsidy, the customer is obligated to participate in a transaction with the second vendor. Accordingly, the controller 110 facilitates the required transaction between the customer and the second vendor (step 1314). For example, the controller 110 may provide, directly or indirectly, a form for the customer to complete. In another embodiment, the controller 110 may initiate the transfer of information about the customer (e.g. a service provider of the customer) to the second vendor. The controller may record each interaction with a customer in the transaction database 250 (FIG. 2).

Referring to FIG. 14, an exemplary web page 1400 illustrates a possible means for providing an offer for a benefit and receiving an acceptance of the offer. The web page 1400 illustrates an embodiment in which the vendor sells books via the World Wide Web. A book that the customer is ready to purchase is indicated by text 1402, and a quantity of that book (one book in FIG. 14) is indicated by text 1404. A price of the books is indicated by text 1406, and similarly a total price (e.g. the sum of item prices and any other prices) due from the customer is indicated by text 1408.

A button 1410 is clicked by the customer if the customer desires to purchase the specified items and thereby consummate the purchase. Upon clicking the button 1410, the items may be immediately deemed as having been purchased by the customer. A button 1412 is clicked by the customer if the customer desires to accept an offer for a subsidy. Alternatively, actuating the button 1412 may indicate that the

customer is interested in further information regarding an offer for a subsidy, and the customer may subsequently indicate whether he accepts the offer.

Referring to FIG. 15, a second exemplary web page 1500 allows the customer to provide customer information via a form having fields 1502 that receive entered text. The customer information is used in applying for a credit card account with a credit card issuer. In one embodiment, the web page 1500 may be displayed after the customer clicks the button 1412 of FIG. 14. Information that is entered via the web page 1500 may be transmitted to the controller 110 upon actuation of a button 1504. Actuation of the button 1504 may furthermore indicate acceptance of the offer for the subsidy. For example, actuation of the button 1504 may indicate a willingness to apply for a credit card account, or that the customer has applied for the credit card account. Conversely, actuation of the button 1506 may indicate rejection of the offer for the subsidy.

Referring to FIG. 16, a flow diagram 1600 illustrates the transfer of funds among parties in accordance with the present invention. A subsidizing vendor 1610 provides an amount 1615 of $50 to a central service 1620 (i.e. the entity that controls or operates the controller 110). The central service 1620 in turn provides an amount 1625 of $45 to a vendor 1630. The vendor 1630 in turn provides an amount 1635 of $42 to its customer 1640. In the illustrated flow diagram 1600, the central service 1620 and the vendor 1630 each retain a portion of the funds received from the subsidizing vendor 1610. In particular, the central service 1620 retains $5 ($5 = $50 - $45) and the vendor 1630 retains $3 ($3 = $45 - $42). The difference between the funds received by a party ("funds in") and the funds provided by a party ("funds out") in connection with a subsidy may depend on various criteria. In one embodiment, the

funds out are a predetermined amount less than the funds in. For example, the central service 1620 may deduct $5 from each amount provided by the subsidizing vendor 1610. In another embodiment, the funds out are a predetermined percentage of the funds in. For example, the vendor 1630 may deduct 5% of the funds in, and thus the funds out form the vendor would be 95% of the funds in to the vendor. Those skilled in the art will realize still other ways to calculate the difference between the funds received by a party and the funds provided by a party in connection with a subsidy.

The amount of funds that are retained by the vendor 1630 may be based on the amount provided by the subsidizing vendor 1610 and the purchase price of the customer 1640. For example, if the subsidizing vendor 1610 is willing to provide $50, yet the customer's purchase price is only $20, the difference of $30 ($30 = $50 - $20) may be retained by the central service 1620 and/or the vendor 1630. The $30 may be allocated among the two parties 1620 and 1630 in numerous manners. For example, one party may retain a fixed amount (e.g. $5) and the other party retains the remainder.

In one embodiment, the central service 1620 retains the excess between the purchase price of the customer and the amount provided by the subsidizing vendor. This amount may be used to augment other offers for subsidies. For example, if a subsidizing vendor is willing to provide $50 per customer, and a first customer's purchase price is only $20, then the difference of $30 may be retained by the subsidizing vendor. A second customer having a purchase price of $80 could then receive his items for free, since the subsidy of $50 together with the retained $30 can offset the $80 purchase price.

Similarly, the amounts retained from numerous transactions may be used to offset other purchase prices. The amounts retained may be collected into a "pool" of

funds with which to increase specific subsidy amounts, e.g., subsidy amounts for purchase prices which exceed a base subsidy amount. Furthermore, historical data on past transactions can permit efficient selection of future transactions that should receive "augmented" subsidy amounts from the pool of funds. For example, historical data can indicate the average transaction amount expected, as well as the expected number of subsequent transactions that will be in a predetermined range of prices. Thus, the most efficient allocation of the pool of funds among future transactions may be determined a priori.

Referring to FIGS. 17A and 17B, a flow chart 1700 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a vendor. The controller 110 receives an indication that the customer is ready to purchase items from the web site of a first vendor (step 1702). A customer may indicate his readiness to purchase by, for example, selecting items to purchase and actuating a specific button that consummates the purchase of the items. Before the customer purchases the items, the controller 110 transmits to the vendor server an indication of an offer for a subsidy from a second vendor (step 1704). Subsequently, a response from the customer is received (step 1706) via the vendor server. For example, the customer may verbally indicate his response to a cashier, the cashier actuates a corresponding button on his POS terminal, and the POS terminal transmits a signal representing the response to the vender server.

If it is determined that the offer is not accepted (step 1708), then the transaction is processed conventionally (step 1710). If however it is determined that the offer is accepted (step 1708), then customer information is received (step 1712).

Such customer information may be used in providing or facilitating an additional transaction that is required of the customer in exchange for the subsidy.

In one embodiment described in further detail below, in exchange for the subsidy the customer agrees to initiate a new service agreement, so that a service is provided by the second vendor. Accordingly, the customer information may comprise an indication of a service that is provided to the customer (e.g. whether the customer has cable television service), or a service provider that provides a service to the customer (e.g. which company provides cable television service to the customer). The additional transaction may occur after a significant amount of time has elapsed. Accordingly, in one embodiment there is a means for determining if the future action has occurred.

Furthermore, a penalty may be assessed against the customer if the customer does not perform the required additional transaction. For example, the subsidy to the customer may be canceled and the transaction may then be processed conventionally. Alternatively, a penalty fee may be charged to the customer.

Similarly, a penalty could be assessed if another imposed condition is violated. For example, a penalty could be assessed if the items are purchased and then returned. Similarly, a returnable purchase could be made a non-returnable purchase in exchange for the subsidy or other benefit. Still another penalty would be to prevent the customer from receiving subsidies from any merchant in the future. Such "blacklisting" could be readily administered by the central controller 110, which can store, for each customer, an indication of whether the customer has been blacklisted and subsequently identify customers that have been blacklisted.

The customer information may be received from the customer. In one embodiment, the controller 110 can send a request via the vendor server that the customer provide customer information. For example, the controller 110 may transmit a form (e.g. via a web site) including questions to be answered. In response, the vendor server would receive answers to the questions, and these answers would constitute the customer information from the customer.

In another embodiment, the customer information may be received from a party other than the customer. For example, information regarding the customer may be received from a third-party database (e.g. a list of addresses to provide a location of the customer, a credit reporting agency). Alternatively, customer information may be received from an ISP (Internet Service Provider), which can provide information such as an Internet address (e.g. email address or IP address) of the customer.

In still another embodiment, the customer information may be received via a "cookie" stored on a customer terminal (e.g. a computer of the customer). Those skilled in the art will understand that a great variety of data may be stored in such cookies, and information may be stored in the cookie in response to various events such as the web sites that have been visited by the customer.

In another embodiment, the customer information may comprise the telephone number of the customer, as determined from an ANI (Automatic Number Identification) signal received from a telephone the customer has used.

Once customer information is received, it may be stored by the controller in the customer database 230 (FIG. 2). Accordingly, information stored in this manner would be more readily accessible in the future, even by new vendors and subsidizing vendors that had not previously interacted with the customer.

The controller 110 may verify whether the customer information is accurate and complete (step 1714). For example, if the information is provided by the customer, it can be advantageous to assure that the customer information is not false. To provide a further incentive for the customer to provide accurate customer information, a penalty may be assessed against the customer if the customer information is not accurate. For example, if it is determined that the customer information is not accurate (step 1716), the subsidy to the customer may be canceled and the transaction is processed conventionally (step 1710). Alternatively, a penalty fee may be charged to the customer if it is determined that the customer information is not accurate. In such an embodiment, it may be further advantageous to verify the customer information before the purchase is consummated. Thus, the threat that the subsidy will not be forthcoming can encourage the customer to provide accurate and complete information.

If it is determined that the customer information is accurate (step 1716), then the controller 110 determines the amount of the subsidy (step 1718). The subsidy amount is typically stored in the offer rules database 270 (FIG. 2). The subsidy amount may be, for example, a predetermined amount or a predetermined percentage (e.g. a predetermined percentage of the total price). In one embodiment, the subsidy amount may also be limited, such that the price charged cannot be lower than zero (i.e. the subsidy may not include a credit). For example, a subsidy amount may be "up to $100 off, but no more than the total price". The subsidy amount is provided to the first vendor (step 1720) as described above with respect to step 1312 of FIG. 13.

Referring to FIGS. 18A and 18B, a flow chart 1800 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to

purchase items from a first vendor. The controller 110 receives a signal via the vendor server indicating that the customer is ready to "check out" his virtual "shopping cart" of items on a web site of the first vendor (step 1802). As is understood by those skilled in the art, a shopping cart of items on a web site defines a set of items the customer desires to purchase. Checking out the shopping cart indicates a desire to proceed with purchasing the selected items. Those skilled in the art will understand that there are still other ways for a customer to indicate that he is to purchase items.

Before the customer purchases the items, the controller 110 transmits to the vendor server an offer for a reduction in the total price in exchange for signing up for a service with a second vendor (step 1804). For example, the service may be telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, satellite television service, or cable television service. Accordingly, the second vendor would be a provider of such services, and the customer would be requested to participate in a transaction (e.g. initiate a service agreement with) with the second vendor.

Subsequently, a response from the customer is received (step 1806) via the vendor server. If it is determined that the offer is not accepted (step 1808), then the transaction is processed conventionally (step 1810). If however it is determined that the offer is accepted (step 1808), then a current service provider of the customer (i.e. a party that provides a specified service to the customer) is determined (step 1812). The customer may be asked to provide information of the current provider, or this information may be determined from other sources. For example, one or more databases may be accessed to determine the long distance telephone service provider of

the customer. Alternatively, the second vendor may allow access to a database of its existing customers to ascertain whether the customer is included in that database.

If it is determined that the customer has a service provider (step 1814), and it is determined that the second vendor already provides the customer with the specified service (step 1816), then the transaction is processed conventionally (step 1810). If it is determined that the customer has a service provider (step 1814), but it is determined that the second vendor does not provide the customer with the specified service (step 1816), then the customer must have a service agreement with another service provider. Accordingly, the existing service agreement is canceled (step 1818).

If it is determined that the customer does not have a service provider of the specified service at all (step 1814), (or if the controller 110 will cancel or has canceled the existing service agreement) then a new service agreement is initiated with the second vendor (step 1820). Thus, the second vendor has acquired a new customer, either by signing up the customer for a new service or by switching providers of the specified service that is provided to the customer. In exchange, the total price of the shopping cart of items is reduced by the amount of the subsidy (step 1822), and controller 110 directs the vendor server to sell the items for this reduced total price (step 1824).

Referring to FIG. 19, a flow chart 1900 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a first vendor. The controller 110 receives an indication that the customer is ready to purchase items from a first vendor (step 1902). The controller 110 may also receive customer information (step 1904), as described above. The customer information may

comprise, for example, a location of the customer or a current service provider of the customer.

A set of subsidies for which the customer may be eligible is determined (step 1906). In one embodiment, the set of subsidies is determined based on customer information. For example, upon reference to the customer information, one or more offer rules may be satisfied. The subsidies corresponding to the satisfied rules would then be included in the set of subsidies. In another embodiment, the offer rules may be satisfied without reference to customer information. For example, an offer rule may be satisfied if the total price of the items (or the price of any of the item) is greater than (or less than) a predetermined threshold. An offer rule may also be satisfied if a particular item is purchased. In yet another embodiment, one or more subsidizing vendors may be contacted, customer information may be transmitted to the subsidizing vendors, and in response the subsidizing vendors may transmit to the controller 110 a description of a subsidy to offer. In still another embodiment, a subsidizing vendor may be selected (e.g. based on a preferential ranking) and a subsidy from this subsidizing vendor is selected.

Offers for each of the subsidies may be provided to the customer (step 1908) for the customer to select one (or more). For example, each offer may be listed on a web page, and the customer must click a hyperlink corresponding to his desired offer. The offers may be provided substantially simultaneously, allowing the customer to evaluate all offers before selecting an offer. Alternatively, the offers may be provided sequentially to the customer. In such an embodiment, the customer would be provided with additional offers only after rejecting one or more offers provided to him. The order in which offers are provided may be determined by the rank of each

subsidizing vendor that provides the offer. The controller 110 may ascertain the rank of each offer by referencing the field 728 (FIG. 7) for each subsidizing vendor that provides the offer. The offers could then be provided in a sequence defined by the rank of each offer.

The customer selection is received (step 1910) and the corresponding subsidy amount is transferred to the first vendor (step 1912). Alternatively, the customer may be similarly prompted to select a vendor from a plurality of vendors, and the customer would subsequently be provided with an offer for a subsidy from the selected vendor.

The controller 110 may select one (or more) offers to provide to a customer based on various criteria. For example, the offer with the highest historical acceptance rate may be selected. The historical acceptance rate may be calculated based on data derived from the fields 1022 and 1024 (FIG. 10). Similarly, the offer with the highest profit (e.g., to the vendor or subsidizing vendor) may be selected.

The customer may select two or more offers, thereby generally receiving more of a benefit than if he had selected only one offer. For example, the customer may select offers that require him to (i) sign up for a particular credit card account, (ii) sign up for a particular satellite television service, and (iii) switch to a new provider of cellular telephone service. The controller 110 could charge the accounts of each of three subsidizing vendors, and the aggregate amount charged could be used to reduce the price charged to a customer for a purchase.

The customer described herein may, in one embodiment, comprise a group of customers such as a group dining at a restaurant. In such an embodiment, an offer may be accepted by a plurality of customers. For example, if an offer for a

subsidy includes a $75 subsidy amount, then if two customers accept the price of the purchase may be reduced by $150 ($150 = $75 x 2).

Referring to FIGS. 20A and 20B, a flow chart 200 illustrates another embodiment of a method for providing an offer for a benefit to a customer that is to purchase items from a first vendor. Specifically, in the illustrated embodiment a customer may be allowed to add more items if a subsidy amount of an offer exceeds the total price of the items he had already selected.

The vendor server receives an indication that the customer is to purchase a first set of items from the vendor (step 2002). The vendor server then transmits the indication of the items to the controller 110 (step 2004). In response, the controller 110 transmits and the vendor server receives an indication of an offer for a subsidy from a subsidizing vendor (step 2006). This indication may include an indication of a subsidy amount.

The vendor server provides the customer with an offer for a subsidy (step 2008). A response to the offer is received (step 2010). If it is determined that the offer is not accepted (step 2012), then the transaction is processed conventionally (step 2014).

If it is determined that the offer is accepted (step 2012), then an indication of the acceptance is transmitted to the controller 110 (step 2016). If the subsidy amount is greater than the total price of the set of items (step 2018), then the transaction is suspended (step 2020) and the customer is instructed to select an additional set of items (step 2022). The customer may be instructed in the same way the customer may be provided with an offer for a subsidy. For example, a POS terminal may display a textual representation of the instructions, which is read by the

customer or read to the customer by a cashier. In another embodiment, a web page may display text describing the instructions.

Subsequently, the vendor server receives an indication of a second set of items the customer has selected (step 2024). The second set and the first set are then purchased for a reduced purchase price. The customer is charged a reduced price (step 2026) which may be zero (e.g. if the subsidy amount exceeds the sum of the prices of the first and second sets of items).

Referring to FIG. 21, a table 2100 illustrates data used in another embodiment of the present invention in which a subsidy amount may be applied over time. The table 2100 represents information that may be stored in the customer database 230 and/or the customer database 330. Use of the information in the table 2100 is described in detail below with respect to FIG. 22. A customer identifier 2102 uniquely identifies a customer who is due to receive the subsidy amount over time. Credit card information 2104, such as a credit card number and account type, specify an account which may be repeatedly credited to grant the customer the benefit due. The number of credits remaining 2106, frequency 2108 and next credit date 2110 specify when the customer may receive another credit to his account. The amount credited to the specified credit card account is indicated by reference numeral 2112.

Referring to FIG. 22, a flow chart 2200 illustrates another embodiment of a method for providing an offer for a benefit to a customer. Specifically, in the illustrated embodiment a subsidy amount is applied over time by repeatedly crediting a credit card account. After the credit card account is credited (step 2202), the controller 110 sets the next credit date (step 2203) which may be readily calculated from the current date and the frequency 2108 (FIG. 21). The controller 110 then waits until the

next credit date (step 2204) and determines whether there are any more credits to apply (step 2206). If there are more credits remaining, then the controller 110 also determines whether the customer has met all of his obligations (step 2208). For example, the customer may have been required to sign up for and maintain a cellular telephone account with a particular subsidizing vendor. In such a situation, the controller 110 would determine whether the customer has canceled the required cellular telephone account. If all obligations have been met by the customer, then the account is credited again (step 2202).

In the above embodiment, additional or unused subsidy amounts may be, e.g., presented to the customer in the form of a store credit (applied against future purchases from the vendor). Alternatively, the unused subsidy amounts may be forfeited.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention.

What is claimed is:

1. A method, comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a first vendor;

transmitting, in response to the received indication of the at least one item, an indication of an offer for a subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receiving an indication that that the customer accepts the offer;

providing an amount of funds to the first vendor; and

facilitating a transaction between the customer and the second vendor.

2. The method of claim 1, in which the step of facilitating the transaction between the customer and the second vendor comprises:

providing a hyperlink to a predetermined web site.

3. The method of claim 1, in which the step of facilitating the transaction between the customer and the second vendor comprises:

transmitting a form for receiving information.

4. The method of claim 1, in which the step of facilitating the transaction between the customer and the second vendor comprises:

determining a service provider that provides a service to the customer.

5. The method of claim 4, in which the step of facilitating the transaction between the customer and the second vendor comprises:

canceling a service agreement with the service provider.

6. The method of claim 4, in which the step of facilitating the transaction between the customer and the second vendor comprises:

initiating a new service agreement so that the service is provided by the second vendor.

7. The method of claim 4, in which the step of determining a service provider that provides a service to the customer comprises:

determining whether the service is provided by the second vendor.

8. The method of claim 1, in which the step of facilitating the transaction between the customer and the second vendor comprises:

switching providers of a service that is provided to the customer.

9. The method of claim 8, in which the service comprises at least one of:

telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, satellite television service, and cable television service.

10. The method of claim 1, in which the step of facilitating the transaction between the customer and the second vendor comprises:

initiating a new service agreement so that a service is provided to the customer.

11. The method of claim 10, in which the service comprises at least one of:

telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, satellite television service, and cable television service.

12. The method of claim 1, in which the step of transmitting an indication of an offer comprises:

transmitting an indication of an offer for a subsidy from a plurality of vendors; and in which the step of facilitating a transaction comprises:

facilitating transactions between the customer and the plurality of vendors.

13. A method, comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a first vendor via a web site;

selecting a subsidy from a plurality of subsidies;

transmitting, in response to the received indication of the at least one item, an indication of an offer for the subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receiving an indication that that the customer accepts the offer;

receiving a first amount of funds from the second vendor;

providing a second amount of funds to the first vendor; and

facilitating a transaction between the customer and the second vendor.

14. The method of claim 13, in which the step of selecting a subsidy from a plurality of subsidies comprises:

selecting a vendor from a plurality of vendors; and

selecting a subsidy from the selected vendor.

15. The method of claim 13, in which the step of selecting a subsidy from a plurality of subsidies comprises:

selecting a subsidy from a plurality of subsidies based on the at least one item.

16. The method of claim 15, in which the step of selecting a subsidy from a plurality of subsidies comprises:

selecting a subsidy from a plurality of subsidies based on a price of the at least one item.

17. The method of claim 13, in which the step of selecting a subsidy from a plurality of subsidies comprises:

selecting at least two subsidies from a plurality of subsidies based on the at least one item.

18. The method of claim 13, in which the step of transmitting an indication of the offer for the subsidy from the second vendor comprises:

transmitting an indication of at least two offers for subsidies from a second vendor.

19. The method of claim 18, further comprising:

receiving from the customer a selection of at least one offer of the at least two offers.

20. The method of claim 13, in which the step of receiving the first amount of funds from the second vendor comprises:

charging the first amount to an account corresponding to the second vendor.

21. The method of claim 13, in which the step of receiving the first amount of funds from the second vendor comprises:

initiating a transfer of funds from an account corresponding to the second vendor.

22. The method of claim 13, in which the step of providing the second amount of funds to the first vendor comprises:

crediting an account corresponding to the first vendor.

23. The method of claim 13, in which the step of providing the second amount of funds to the first vendor comprises:

initiating a transfer of funds to an account corresponding to the first vendor.

24. The method of claim 13, in which the step of transmitting an indication of an offer comprises:

transmitting an indication of an offer for a subsidy from a plurality of vendors;

and in which the step of receiving a first amount of funds from the second vendor comprises:

receiving a portion of the first amount of funds from each of the plurality of vendors;

and in which the step of facilitating a transaction comprises:

facilitating transactions between the customer and the plurality of vendors.

25. The method of claim 13, in which the step of receiving the first amount of funds from the second vendor comprises:

charging a third amount to a first account corresponding to the second vendor; and

charging a fourth amount to a second account corresponding to a third vendor,

in which the first amount is a sum of the third amount and the fourth amount.

26. The method of claim 13, in which the step of receiving the first amount of funds from the second vendor comprises:

initiating a transfer of a third amount of funds from a first account corresponding to the second vendor; and

initiating a transfer of a fourth amount of funds from a second account corresponding to a third vendor,

in which the first amount is a sum of the third amount and the fourth amount.

27. The method of claim 13, further comprising:

calculating the second amount of funds based on the first amount of funds.

28. The method of claim 13, in which the second amount of funds is based on a predetermined amount less than the first amount of funds.

29. The method of claim 13, in which the second amount of funds is based on a predetermined percentage of the first amount of funds.

30. The method of claim 13, in which the indication of the offer for the subsidy comprises:

an indication of a subsidy amount, and

an indication of a transaction the customer is required to perform in exchange for receiving the subsidy amount.

31. A method, comprising the steps of:

transmitting an indication of at least one item that a customer is to purchase, the at least one item having an associated total price;

receiving, in response to the transmitted indication of the at least one item, an indication of an offer for a subsidy from a vendor;

providing to the customer, in response to the received indication of the offer, the offer for the subsidy, the step of providing the offer being performed before the item is purchased;

receiving from the customer an acceptance of the offer;

transmitting an indication of the acceptance of the offer; and

charging the customer a second price for the at least one item, the second price being less than the total price.

32. The method of claim 31, in which the step of providing to the customer the offer for the subsidy comprises:

displaying text that represents the offer.

33. The method of claim 31, in which the step of charging the customer the second price for the at least one item comprises:

crediting an amount of funds to an account, the amount of funds being based on a difference between the total price and the second price.

34. The method of claim 33, in which the step of crediting comprises:

crediting the amount of funds to a credit card account.

35. The method of claim33, in which the step of crediting the amount of funds to the account comprises:

crediting a first amount of funds to the account; and

crediting a second amount of funds to the account.

36. The method of claim 35, in which the step of crediting the second subsidy amount to the account is performed at least a predetermined time after the step of crediting the first subsidy amount to the account is performed.

37. The method of claim 31, in which the step of charging the customer the second price for the at least one item comprises:

charging the second price to an account.

38. The method of claim 37, in which the step of charging comprises:

charging the total price to a credit card account.

39. The method of claim 31, in which the step of charging the customer the second price for the at least one item comprises:

transmitting a request to purchase an additional item;

receiving an indication of an additional item that a customer is to purchase, the at least one item having an associated second price;

charging the customer the second price for the at least one item and the additional item, the second price being less than a sum of the total price and the second price.

40. The method of claim 31, further comprising:

receiving an credit card identifier that identifies a credit card account.

41. The method of claim 31, further comprising:

receiving an amount of funds from the vendor.

42. The method of claim 41, in which the amount of funds is based on a difference between the second price and the total price.

43. The method of claim 31, further comprising:

receiving an amount of funds from a party other than the customer.

44. The method of claim 31, further comprising:

calculating the second price based on the total price.

45. The method of claim 31, in which the second price is based on a predetermined amount less than the total price.

46. The method of claim 31, in which the second price is based on a predetermined percentage of the total price.

47. The method of claim 31, further comprising:

facilitating a transaction between the customer and the vendor.

48. The method of claim 31, in which the step of receiving an indication of an offer comprises:

receiving, in response to the transmitted indication of the at least one item, an indication of a plurality of offers for subsidies.

49. The method of claim 48, in which the step of providing the offer for the subsidy comprises:

providing to the customer the offers for the subsidies.

50. The method of claim 49, in which the step of providing to the customer the offers for the subsidies comprises:

providing the offers for the subsidies substantially simultaneously to the customer.

51. The method of claim 49, in which the step of providing to the customer the offers for the subsidies comprises:

providing the offers for the subsidies sequentially to the customer.

52. The method of claim 51, in which the step of providing to the customer the offers for the subsidies comprises:

providing a first offer of the plurality of offers to the customer;

receiving from the customer a rejection of the first offer; and

providing a second offer of the plurality of offers to the customer after receiving the rejection.

53. The method of claim 51, further comprising:

ascertaining a rank of each offer of the plurality of offers;

and in which the step of providing to the customer the offers for the subsidies comprises:

providing the offers for the subsidies in a sequence defined by the rank of each offer.

54. The method of claim 48, in which the step of providing the offer for the subsidy comprises:

selecting at least one offer of the plurality of offers; and

providing to the customer the selected at least one offer.

55. The method of claim 54, in which the step of selecting at least one offer comprises:

selecting the at least one offer based on a historical acceptance rate of each offer.

56. The method of claim 54, in which the step of selecting at least one offer comprises:

selecting the at least one offer based on a profit of each offer.

57. The method of claim 31, in which the indication of the offer for the subsidy comprises:

an indication of a subsidy amount, and

an indication of a transaction the customer is required to perform in exchange for receiving the subsidy amount.

58. The method of claim 57, in which the step of charging comprises:

not charging the customer for the at least one item if the subsidy amount is greater than the total price; and

crediting an amount of funds to an account, the amount of funds being based on a difference between the total price and the subsidy amount.

59. The method of claim 57, in which the step of charging comprises:

charging the customer a second price for the at least one item, the second price being based on a difference between the total price and the subsidy amount.

60. The method of claim 31, in which the second price is zero.

61. An apparatus, comprising:

means for receiving an indication of at least one item that a customer is to purchase from a first vendor;

means for transmitting, in response to the received indication of the at least one item, an indication of an offer for a subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

means for receiving an indication that that the customer accepts the offer;

means for providing an amount of funds to the first vendor; and

means for facilitating a transaction between the customer and the second vendor.

62. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive an indication of at least one item that a customer is to purchase from a first vendor;

transmit, in response to the received indication of the at least one item, an indication of an offer for a subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receive an indication that that the customer accepts the offer;

provide an amount of funds to the first vendor; and

facilitate a transaction between the customer and the second vendor.

63. A computer readable medium encoded with processing instructions for implementing a method performed by a processor, the method comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a first vendor;

transmitting, in response to the received indication of the at least one item, an indication of an offer for a subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receiving an indication that that the customer accepts the offer;

providing an amount of funds to the first vendor; and

facilitating a transaction between the customer and the second vendor.

64. An apparatus, comprising:

means for receiving an indication of at least one item that a customer is to purchase from a first vendor via a web site;

means for selecting a subsidy from a plurality of subsidies;

means for transmitting, in response to the received indication of the at least one item, an indication of an offer for the subsidy from a second vendor, the step of

transmitting an indication of the offer being performed before the at least one item is purchased;

means for receiving an indication that that the customer accepts the offer;

means for receiving a first amount of funds from the second vendor;

means for providing a second amount of funds to the first vendor; and

means for facilitating a transaction between the customer and the second vendor.

65. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

receive an indication of at least one item that a customer is to purchase from a first vendor via a web site;

select a subsidy from a plurality of subsidies;

transmit, in response to the received indication of the at least one item, an indication of an offer for the subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receive an indication that that the customer accepts the offer;

receive a first amount of funds from the second vendor;

provide a second amount of funds to the first vendor; and

facilitate a transaction between the customer and the second vendor.

66. A computer readable medium encoded with processing instructions for implementing a method performed by a processor, the method comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a first vendor via a web site;

selecting a subsidy from a plurality of subsidies;

transmitting, in response to the received indication of the at least one item, an indication of an offer for the subsidy from a second vendor, the step of transmitting an indication of the offer being performed before the at least one item is purchased;

receiving an indication that that the customer accepts the offer;

receiving a first amount of funds from the second vendor;

providing a second amount of funds to the first vendor; and

facilitating a transaction between the customer and the second vendor.

67. An apparatus, comprising:

means for transmitting an indication of at least one item that a customer is to purchase, the at least one item having an associated total price;

means for receiving, in response to the transmitted indication of the at least one item, an indication of an offer for a subsidy from a vendor;

means for providing to the customer, in response to the received indication of the offer, the offer for the subsidy, the step of providing the offer being performed before the item is purchased;

means for receiving from the customer an acceptance of the offer;

means for transmitting an indication of the acceptance of the offer; and

means for charging the customer a second price for the at least one item, the second price being less than the total price.

68. An apparatus, comprising:

a data storage device; and

a processor connected to the data storage device,

the data storage device storing a program for controlling the processor; and

the processor operative with the program to:

transmit an indication of at least one item that a customer is to purchase, the at least one item having an associated total price;

receive, in response to the transmitted indication of the at least one item, an indication of an offer for a subsidy from a vendor;

provide to the customer, in response to the received indication of the offer, the offer for the subsidy, the step of providing the offer being performed before the item is purchased;

receive from the customer an acceptance of the offer;

transmit an indication of the acceptance of the offer; and

charge the customer a second price for the at least one item, the second price being less than the total price.

69. A computer readable medium encoded with processing instructions for implementing a method performed by a processor, the method comprising the steps of:

transmitting an indication of at least one item that a customer is to purchase, the at least one item having an associated total price;

receiving, in response to the transmitted indication of the at least one item, an indication of an offer for a subsidy from a vendor;

providing to the customer, in response to the received indication of the offer, the offer for the subsidy, the step of providing the offer being performed before the item is purchased;

receiving from the customer an acceptance of the offer;

transmitting an indication of the acceptance of the offer; and

charging the customer a second price for the at least one item, the second price being less than the total price.

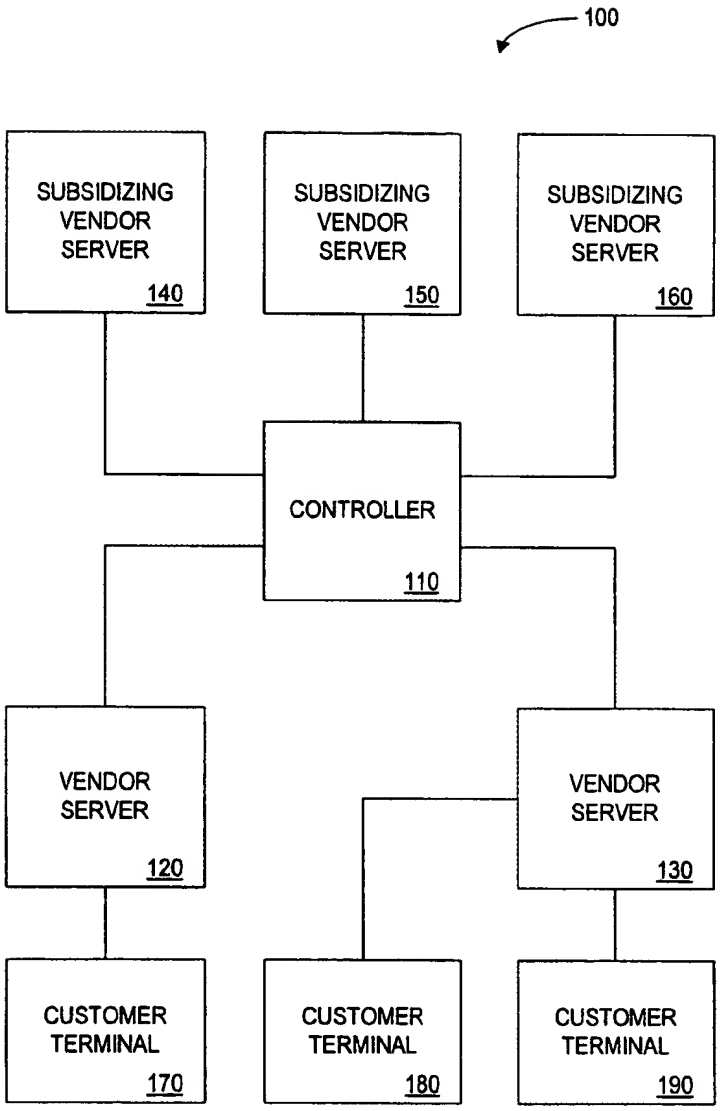

100
SUBSIDIZING VENDOR SERVER 140
SUBSIDIZING VENDOR SERVER 150
SUBSIDIZING VENDOR SERVER 160
CONTROLLER 110
VENDOR SERVER 120
VENDOR SERVER 130
CUSTOMER TERMINAL 170
CUSTOMER TERMINAL 180
CUSTOMER TERMINAL 190

FIG. 1

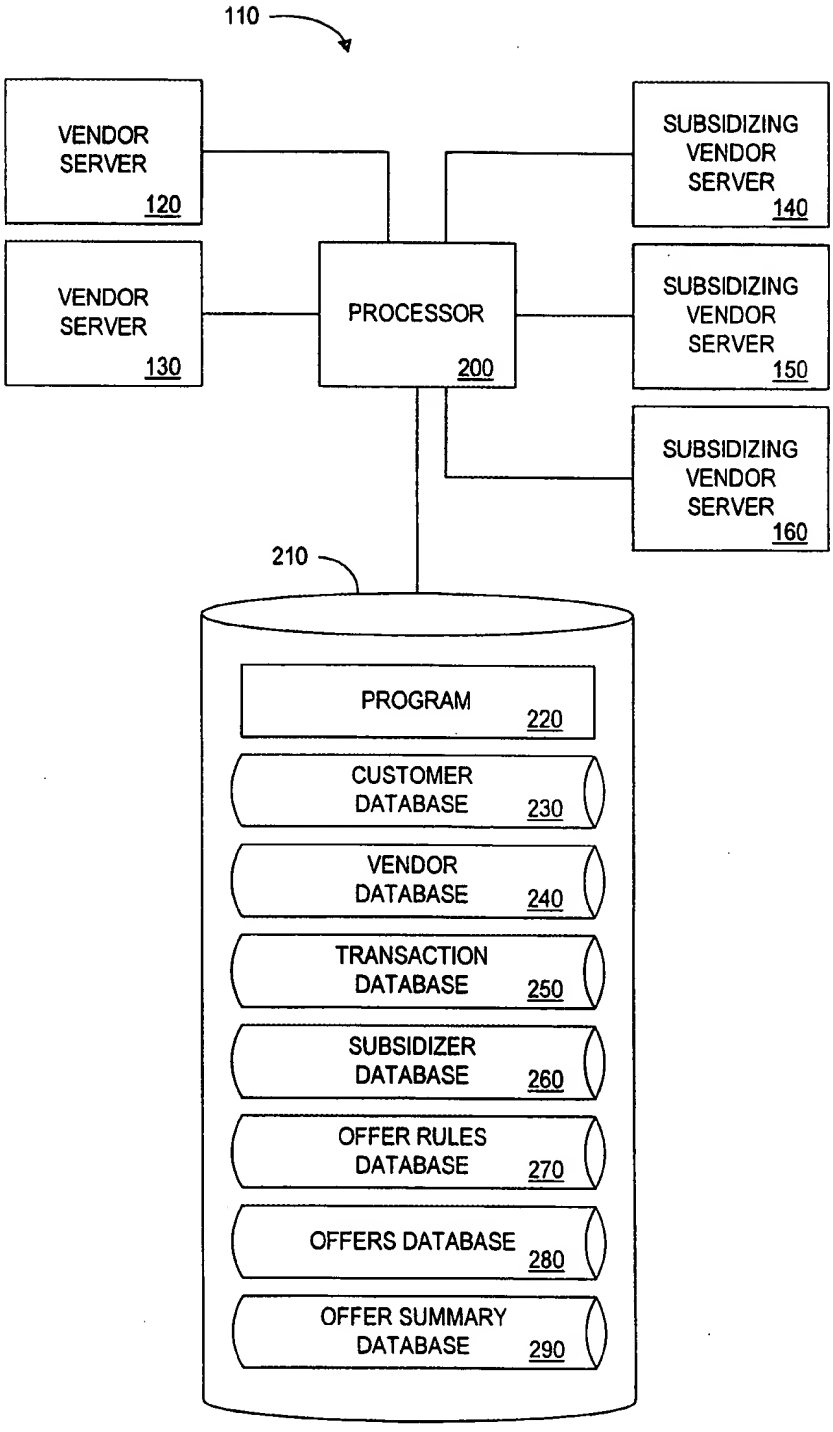

110
VENDOR SERVER 120
VENDOR SERVER 130
PROCESSOR 200
SUBSIDIZING VENDOR SERVER 140
SUBSIDIZING VENDOR SERVER 150
SUBSIDIZING VENDOR SERVER 160
210
PROGRAM 220
CUSTOMER DATABASE 230
VENDOR DATABASE 240
TRANSACTION DATABASE 250
SUBSIDIZER DATABASE 260
OFFER RULES DATABASE 270
OFFERS DATABASE 280
OFFER SUMMARY DATABASE 290

FIG. 2

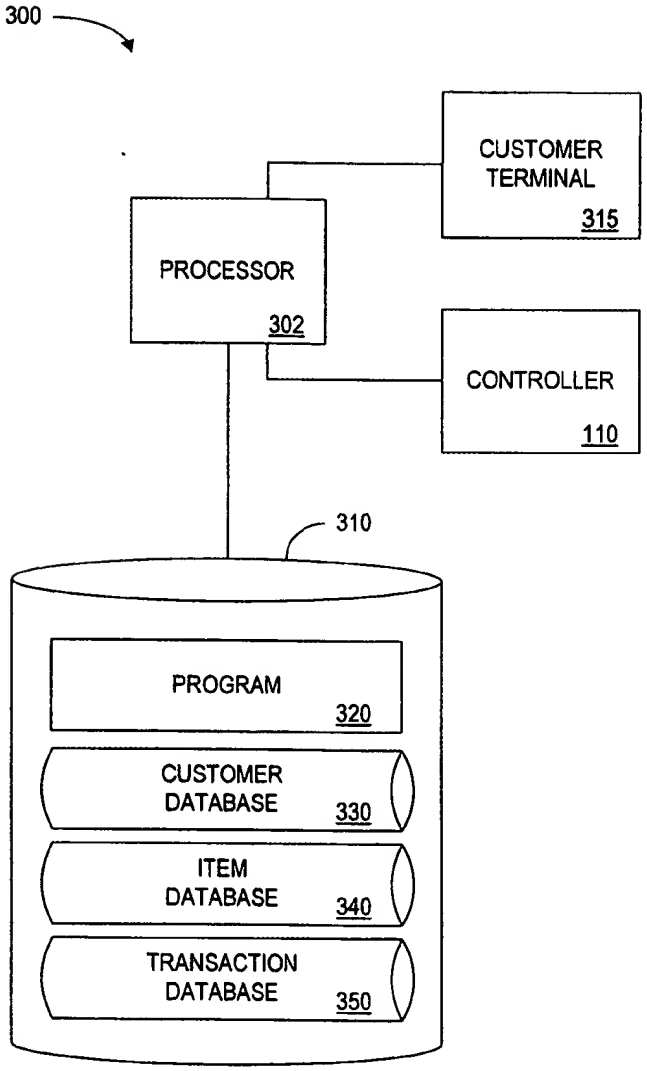

300
CUSTOMER TERMINAL
315
PROCESSOR
302
CONTROLLER
110
310
PROGRAM
320
CUSTOMER DATABASE
330
ITEM DATABASE
340
TRANSACTION DATABASE
350

FIG. 3

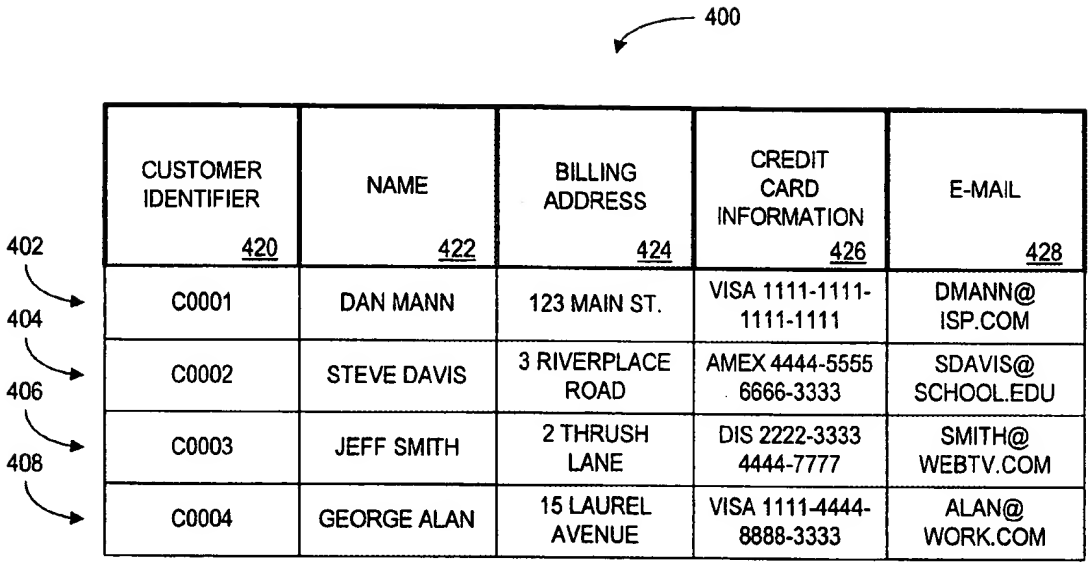
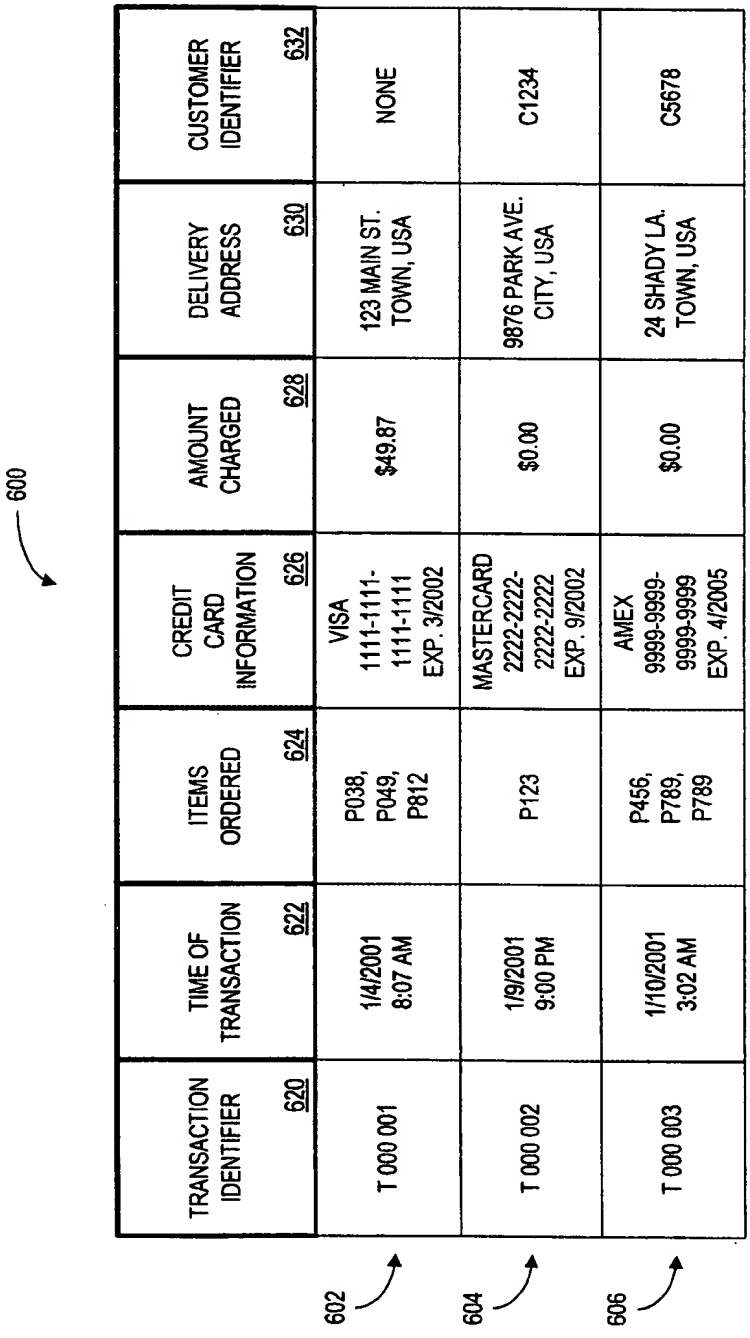

400
402
404
406
408
CUSTOMER IDENTIFIER 420
NAME 422
BILLING ADDRESS 424
CREDIT CARD INFORMATION 426
E-MAIL 428
C0001
DAN MANN
123 MAIN ST.
VISA 1111-1111-1111-1111
DMANN@ISP.COM
C0002
STEVE DAVIS
3 RIVERPLACE ROAD
AMEX 4444-5555 6666-3333
SDAVIS@SCHOOL.EDU
C0003
JEFF SMITH
2 THRUSH LANE
DIS 2222-3333 4444-7777
SMITH@WEBTV.COM
C0004
GEORGE ALAN
15 LAUREL AVENUE
VISA 1111-4444-8888-3333
ALAN@WORK.COM

FIG. 4

| | VENDOR IDENTIFIER 520 | VENDOR NAME 522 | VENDOR E-MAIL ADDRESS 524 | AMOUNT OWED TO VENDOR 526 |
|---|---|---|---|---|
| 502 | V001 | VENDOR X | X@X.COM | $0.00 |
| 504 | V002 | VENDOR Y | Y@Y.COM | $100.00 |
| 506 | V003 | VENDOR Z | Z@Z.COM | $987.13 |
| 508 | V004 | VENDOR Q | Q@Q.COM | $45.00 |

FIG. 5



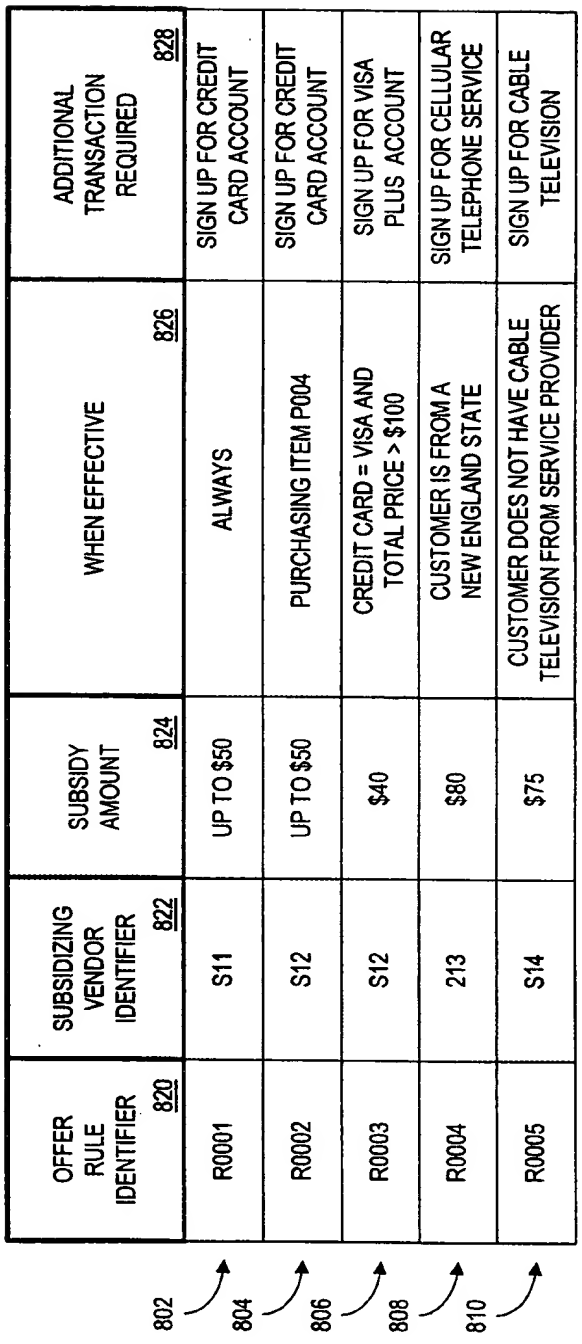

| TRANSACTION IDENTIFIER 620 | TIME OF TRANSACTION 622 | ITEMS ORDERED 624 | CREDIT CARD INFORMATION 626 | AMOUNT CHARGED 628 | DELIVERY ADDRESS 630 | CUSTOMER IDENTIFIER 632 |
|---|---|---|---|---|---|---|
| T 000 001 | 1/4/2001 8:07 AM | P038, P049, P812 | VISA 1111-1111-1111-1111 EXP. 3/2002 | $49.87 | 123 MAIN ST. TOWN, USA | NONE |
| T 000 002 | 1/9/2001 9:00 PM | P123 | MASTERCARD 2222-2222-2222-2222 EXP. 9/2002 | $0.00 | 9876 PARK AVE. CITY, USA | C1234 |
| T 000 003 | 1/10/2001 3:02 AM | P456, P789, P789 | AMEX 9999-9999-9999-9999 EXP. 4/2005 | $0.00 | 24 SHADY LA. TOWN, USA | C5678 |

FIG. 6

700

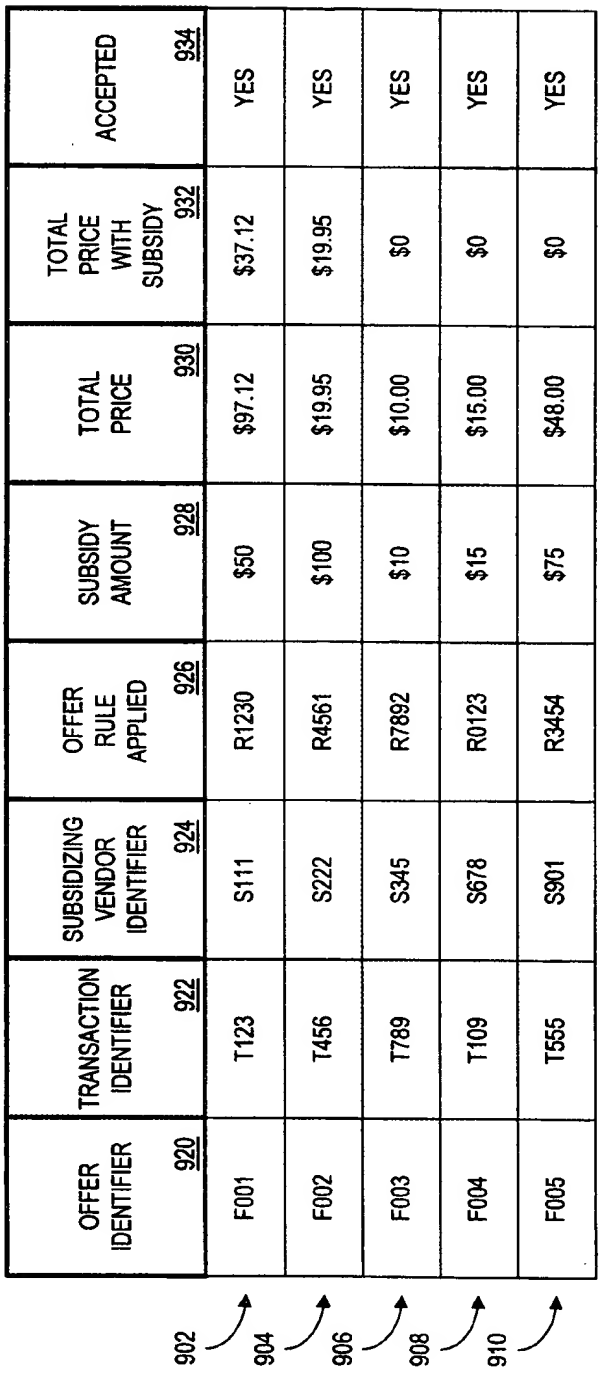
| | SUBSIDIZING VENDOR IDENTIFIER 720 | SUBSIDIZING VENDOR NAME 722 | ACCOUNT 724 | AMOUNT OWED BY SUBSIDIZING VENDOR 726 | RANK 728 |
|---|---|---|---|---|---|
| 702 | S001 | CREDIT CARD COMPANY X | BANK ACCOUNT #2345678 | $855.00 | 1 |
| 704 | S002 | LONG DISTANCE TELEPHONE Y | MC 1111-2222-3333-4444 | $4,390.00 | 2 |
| 706 | S003 | SATELLITE TELEVISION Z | PREPAID BALANCE $10,500 | $0 | 3 |

FIG. 7




| OFFER RULE IDENTIFIER 820 | SUBSIDIZING VENDOR IDENTIFIER 822 | SUBSIDY AMOUNT 824 | WHEN EFFECTIVE 826 | ADDITIONAL TRANSACTION REQUIRED 828 |
|---|---|---|---|---|
| R0001 | S11 | UP TO $50 | ALWAYS | SIGN UP FOR CREDIT CARD ACCOUNT |
| R0002 | S12 | UP TO $50 | PURCHASING ITEM P004 | SIGN UP FOR CREDIT CARD ACCOUNT |
| R0003 | S12 | $40 | CREDIT CARD = VISA AND TOTAL PRICE > $100 | SIGN UP FOR VISA PLUS ACCOUNT |
| R0004 | 213 | $80 | CUSTOMER IS FROM A NEW ENGLAND STATE | SIGN UP FOR CELLULAR TELEPHONE SERVICE |
| R0005 | S14 | $75 | CUSTOMER DOES NOT HAVE CABLE TELEVISION FROM SERVICE PROVIDER | SIGN UP FOR CABLE TELEVISION |

FIG. 8




| OFFER IDENTIFIER 920 | TRANSACTION IDENTIFIER 922 | SUBSIDIZING VENDOR IDENTIFIER 924 | OFFER RULE APPLIED 926 | SUBSIDY AMOUNT 928 | TOTAL PRICE 930 | TOTAL PRICE WITH SUBSIDY 932 | ACCEPTED 934 |
|---|---|---|---|---|---|---|---|
| F001 | T123 | S111 | R1230 | $50 | $97.12 | $37.12 | YES |
| F002 | T456 | S222 | R4561 | $100 | $19.95 | $19.95 | YES |
| F003 | T789 | S345 | R7892 | $10 | $10.00 | $0 | YES |
| F004 | T109 | S678 | R0123 | $15 | $15.00 | $0 | YES |
| F005 | T555 | S901 | R3454 | $75 | $48.00 | $0 | YES |

FIG. 9

1000

| SUBSIDIZING VENDOR IDENTIFIER: S888 1002 | | | |
|---|---|---|---|
| TOTAL NUMBER OF OFFERS: 1,794 1004 | | | |
| TOTAL NUMBER OF OFFERS ACCEPTED: 1,003 1006 | | | |
| TOTAL AMOUNT OF SUBSIDIES: $52,800.00 1008 | | | |
| OFFER RULE IDENTIFIER 1020 | NUMBER OF OFFERS 1022 | NUMBER OF OFFERS ACCEPTED 1024 | AMOUNT OF SUBSIDIES DUE 1026 |
| 1010 → R1111 | 1004 | 500 | $2,500.00 |
| 1012 → R2222 | 790 | 503 | $50,300.00 |

FIG. 10

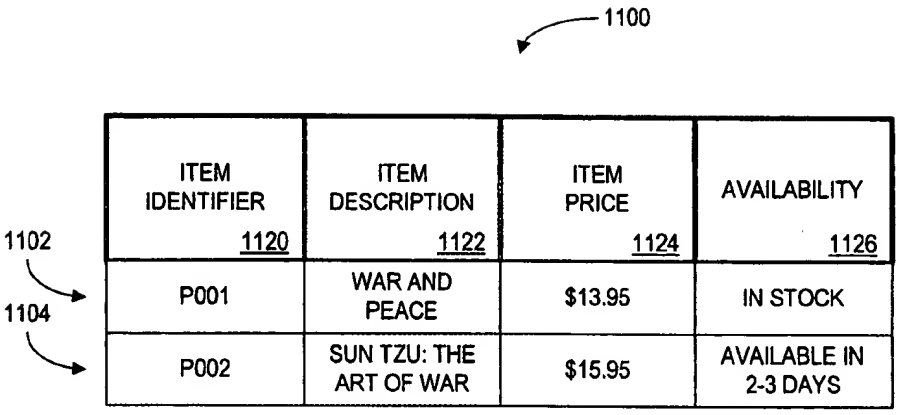

1100
1102
1104
ITEM IDENTIFIER 1120
ITEM DESCRIPTION 1122
ITEM PRICE 1124
AVAILABILITY 1126
P001
WAR AND PEACE
$13.95
IN STOCK
P002
SUN TZU: THE ART OF WAR
$15.95
AVAILABLE IN 2-3 DAYS

FIG. 11

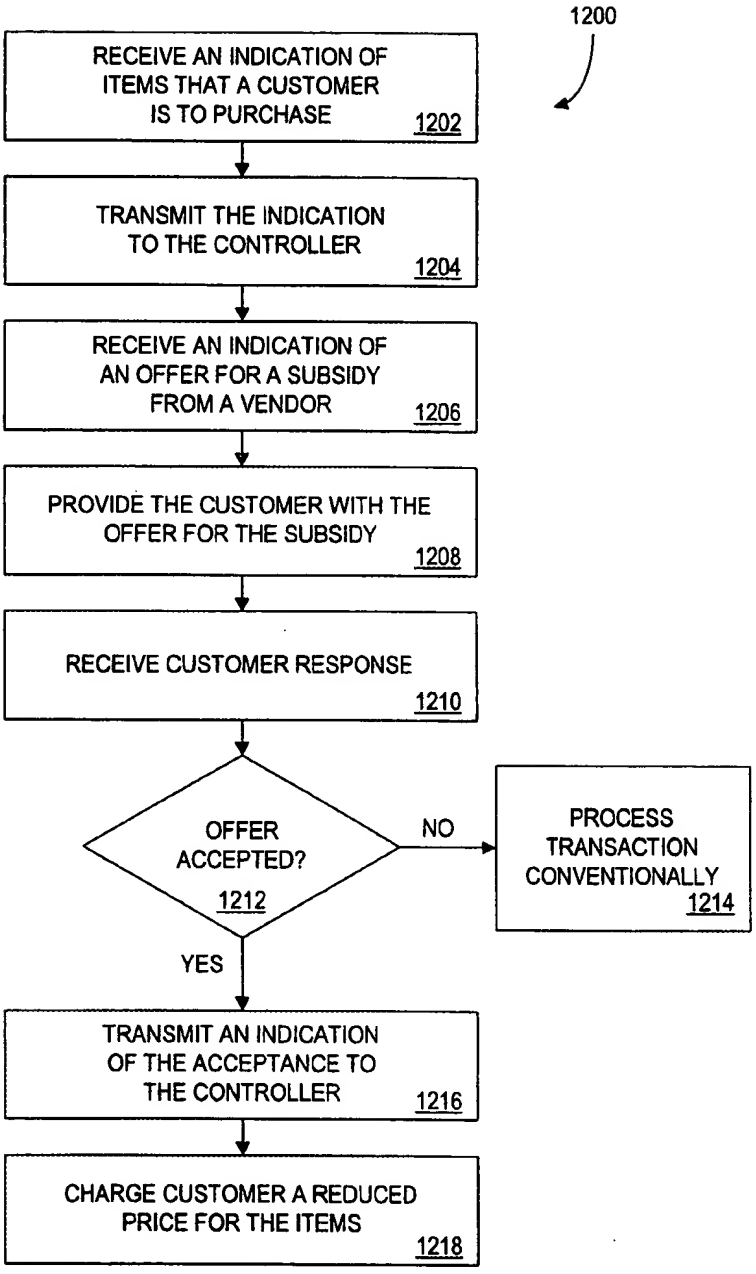

1200
RECEIVE AN INDICATION OF ITEMS THAT A CUSTOMER IS TO PURCHASE 1202
TRANSMIT THE INDICATION TO THE CONTROLLER 1204
RECEIVE AN INDICATION OF AN OFFER FOR A SUBSIDY FROM A VENDOR 1206
PROVIDE THE CUSTOMER WITH THE OFFER FOR THE SUBSIDY 1208
RECEIVE CUSTOMER RESPONSE 1210
OFFER ACCEPTED? 1212
NO
PROCESS TRANSACTION CONVENTIONALLY 1214
YES
TRANSMIT AN INDICATION OF THE ACCEPTANCE TO THE CONTROLLER 1216
CHARGE CUSTOMER A REDUCED PRICE FOR THE ITEMS 1218

FIG. 12

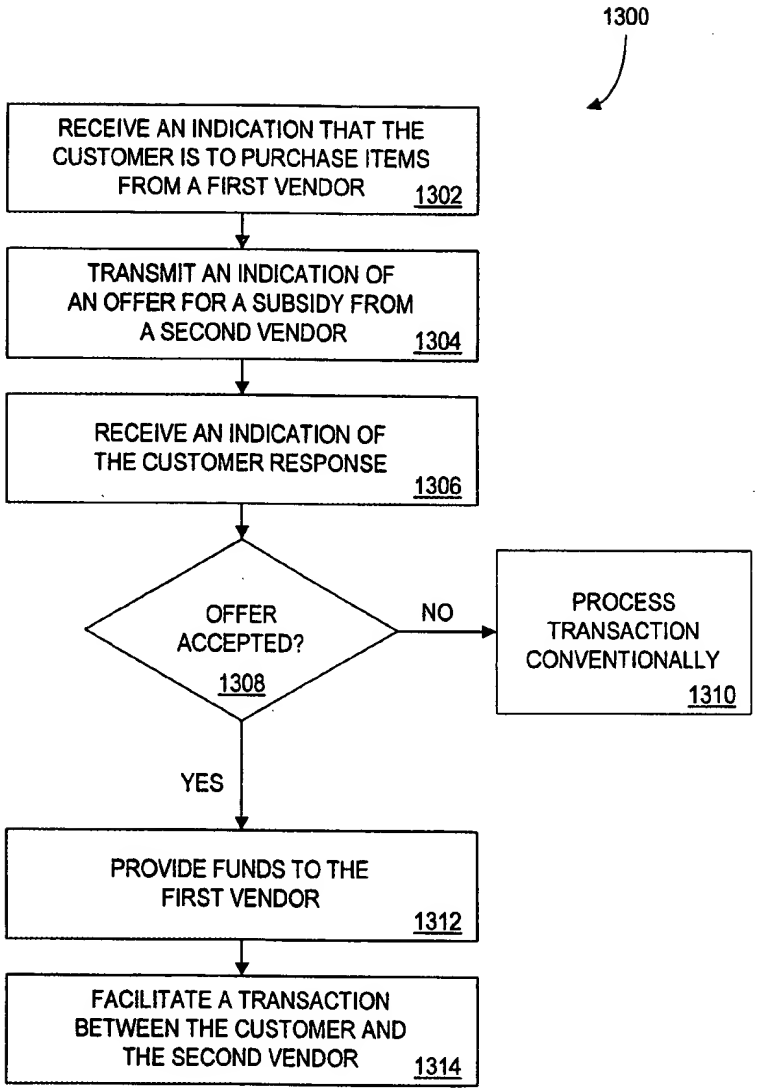

1300
RECEIVE AN INDICATION THAT THE CUSTOMER IS TO PURCHASE ITEMS FROM A FIRST VENDOR 1302
TRANSMIT AN INDICATION OF AN OFFER FOR A SUBSIDY FROM A SECOND VENDOR 1304
RECEIVE AN INDICATION OF THE CUSTOMER RESPONSE 1306
OFFER ACCEPTED? 1308
NO
PROCESS TRANSACTION CONVENTIONALLY 1310
YES
PROVIDE FUNDS TO THE FIRST VENDOR 1312
FACILITATE A TRANSACTION BETWEEN THE CUSTOMER AND THE SECOND VENDOR 1314

FIG. 13

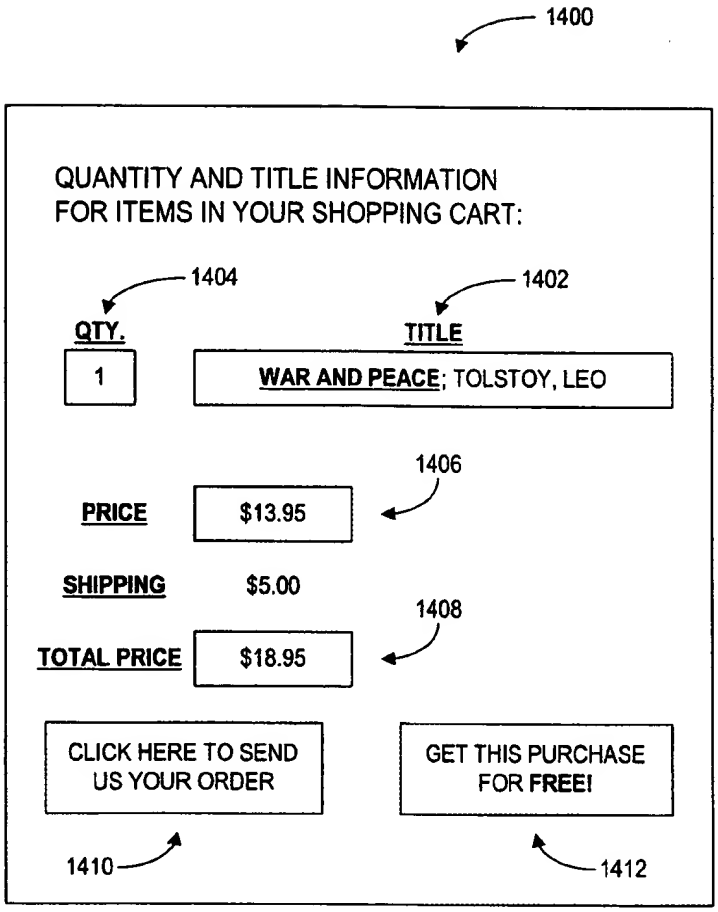

1400
QUANTITY AND TITLE INFORMATION
FOR ITEMS IN YOUR SHOPPING CART:
1404
1402
QTY.
TITLE
1
WAR AND PEACE; TOLSTOY, LEO
1406
PRICE
$13.95
SHIPPING
$5.00
1408
TOTAL PRICE
$18.95
CLICK HERE TO SEND US YOUR ORDER
GET THIS PURCHASE FOR FREE!
1410
1412

FIG. 14

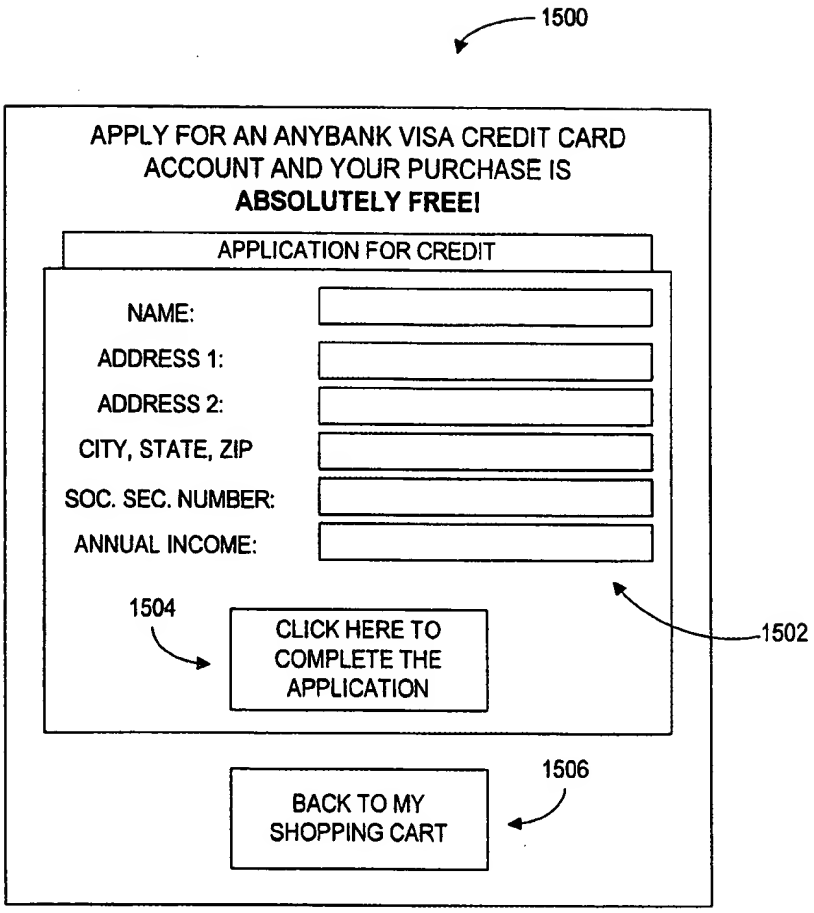

1500
APPLY FOR AN ANYBANK VISA CREDIT CARD ACCOUNT AND YOUR PURCHASE IS ABSOLUTELY FREE!
APPLICATION FOR CREDIT
NAME:
ADDRESS 1:
ADDRESS 2:
CITY, STATE, ZIP
SOC. SEC. NUMBER:
ANNUAL INCOME:
1504
CLICK HERE TO COMPLETE THE APPLICATION
1502
1506
BACK TO MY SHOPPING CART

FIG. 15

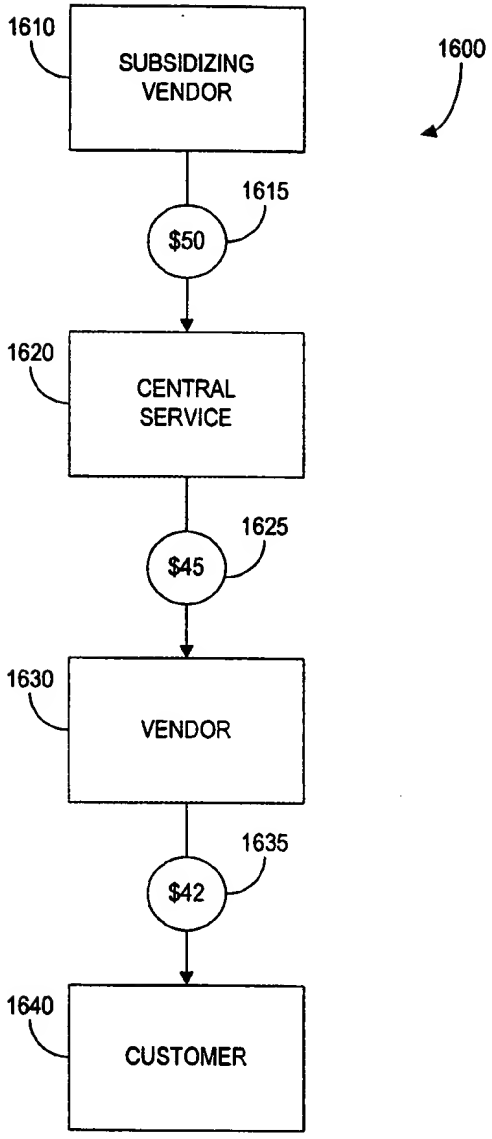

1610
SUBSIDIZING VENDOR
1600
1615
$50
1620
CENTRAL SERVICE
1625
$45
1630
VENDOR
1635
$42
1640
CUSTOMER

FIG. 16

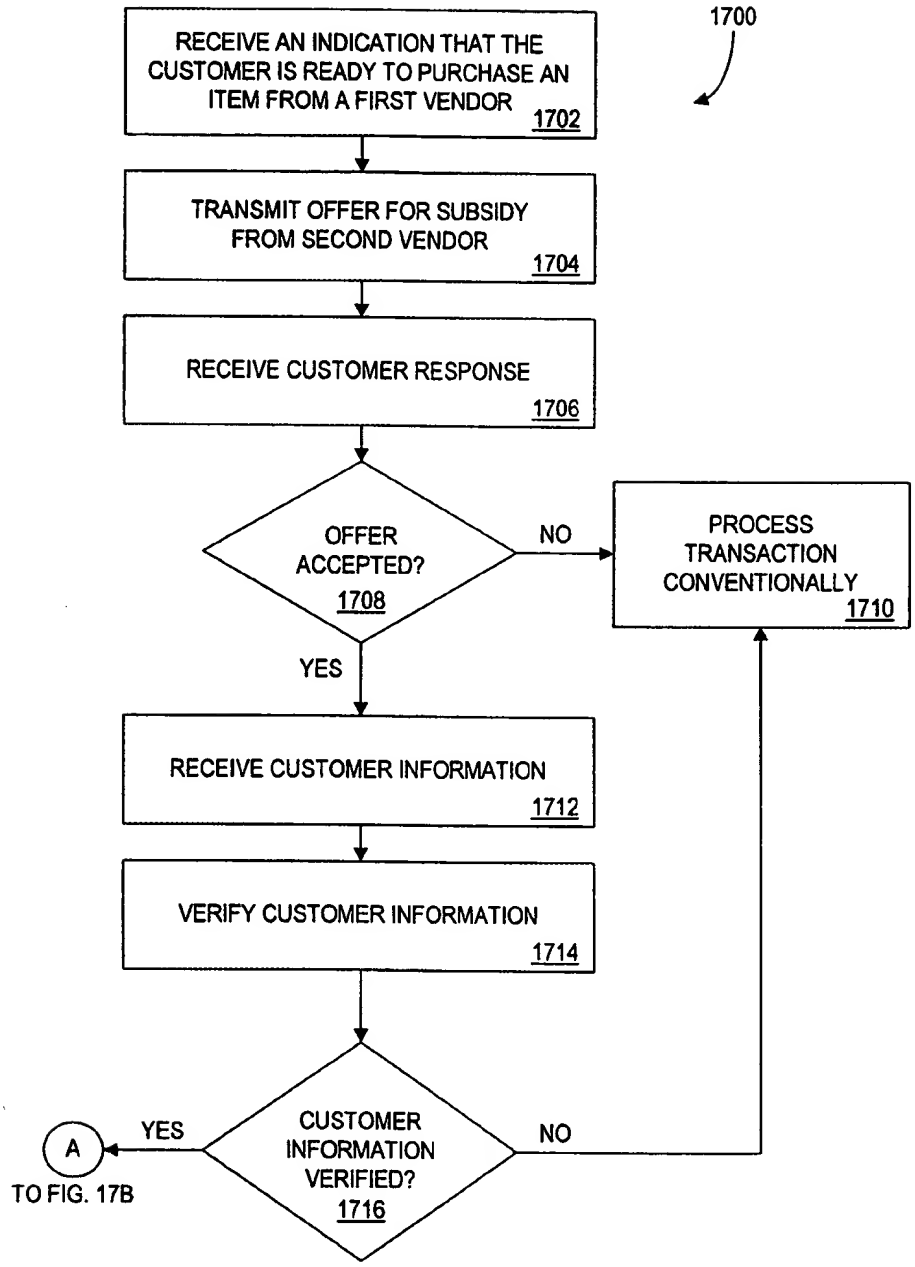

1700
RECEIVE AN INDICATION THAT THE CUSTOMER IS READY TO PURCHASE AN ITEM FROM A FIRST VENDOR
1702
TRANSMIT OFFER FOR SUBSIDY FROM SECOND VENDOR
1704
RECEIVE CUSTOMER RESPONSE
1706
OFFER ACCEPTED?
1708
NO
PROCESS TRANSACTION CONVENTIONALLY
1710
YES
RECEIVE CUSTOMER INFORMATION
1712
VERIFY CUSTOMER INFORMATION
1714
CUSTOMER INFORMATION VERIFIED?
1716
YES
NO
A
TO FIG. 17B

FIG. 17A

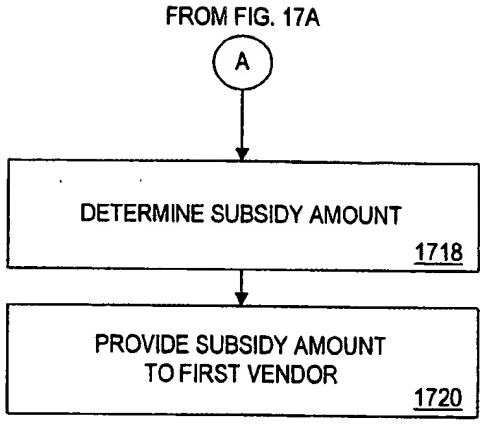

FROM FIG. 17A
A
DETERMINE SUBSIDY AMOUNT
1718
PROVIDE SUBSIDY AMOUNT TO FIRST VENDOR
1720

FIG. 17B

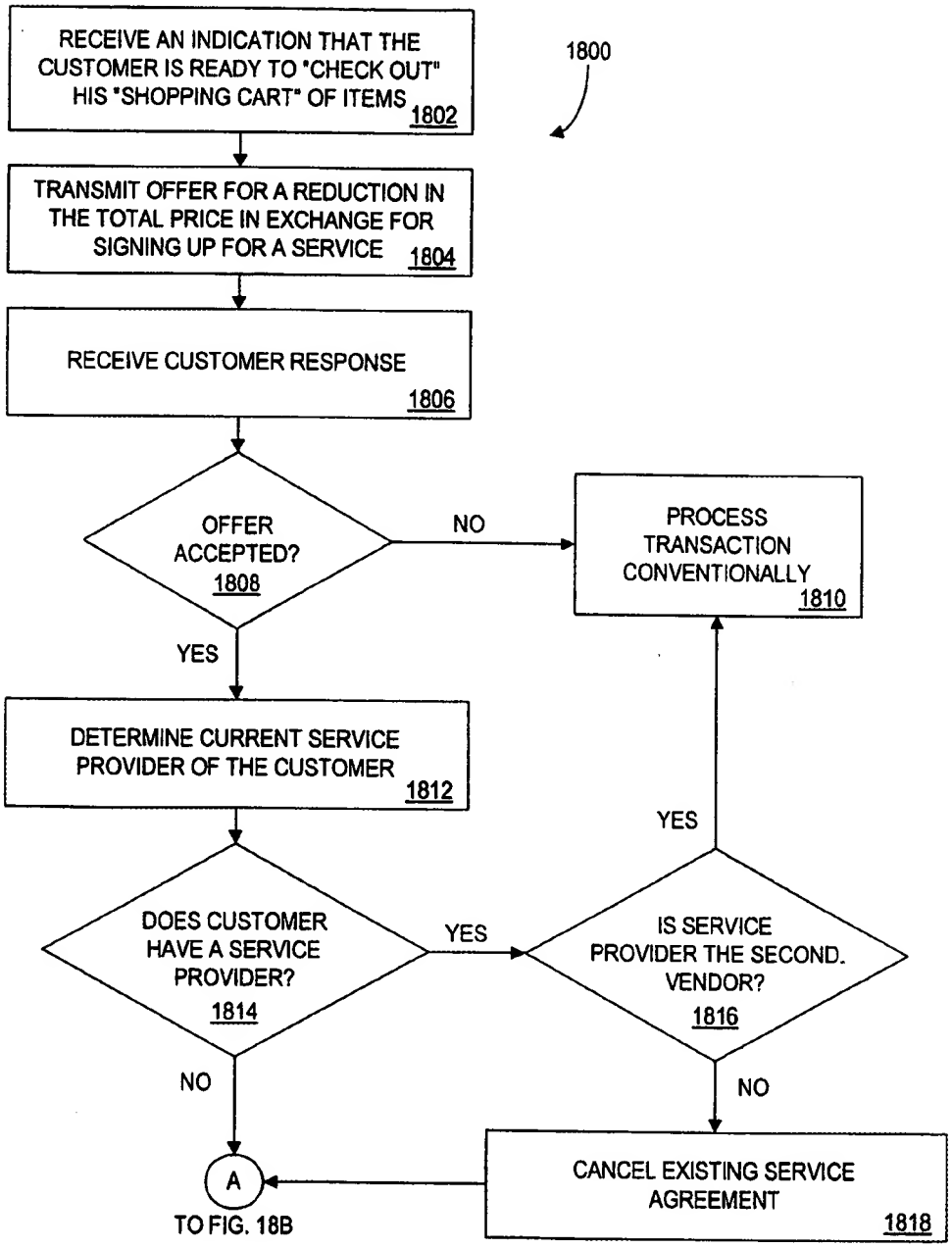

RECEIVE AN INDICATION THAT THE CUSTOMER IS READY TO "CHECK OUT" HIS "SHOPPING CART" OF ITEMS 1802
1800
TRANSMIT OFFER FOR A REDUCTION IN THE TOTAL PRICE IN EXCHANGE FOR SIGNING UP FOR A SERVICE 1804
RECEIVE CUSTOMER RESPONSE 1806
OFFER ACCEPTED? 1808
NO
PROCESS TRANSACTION CONVENTIONALLY 1810
YES
DETERMINE CURRENT SERVICE PROVIDER OF THE CUSTOMER 1812
YES
DOES CUSTOMER HAVE A SERVICE PROVIDER? 1814
YES
IS SERVICE PROVIDER THE SECOND. VENDOR? 1816
NO
NO
A
TO FIG. 18B
CANCEL EXISTING SERVICE AGREEMENT 1818

FIG. 18A

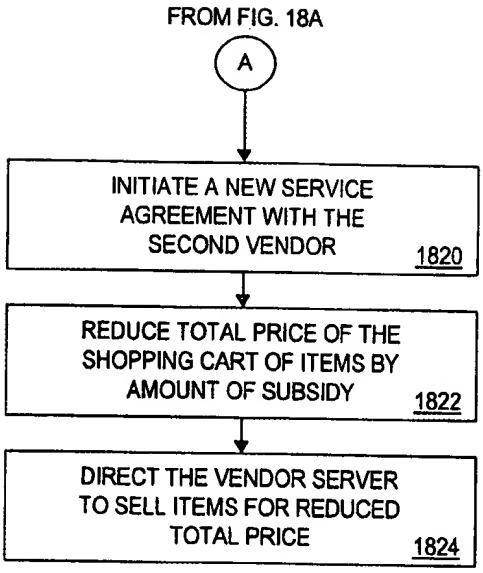

FROM FIG. 18A
A
INITIATE A NEW SERVICE AGREEMENT WITH THE SECOND VENDOR
1820
REDUCE TOTAL PRICE OF THE SHOPPING CART OF ITEMS BY AMOUNT OF SUBSIDY
1822
DIRECT THE VENDOR SERVER TO SELL ITEMS FOR REDUCED TOTAL PRICE
1824

FIG. 18B

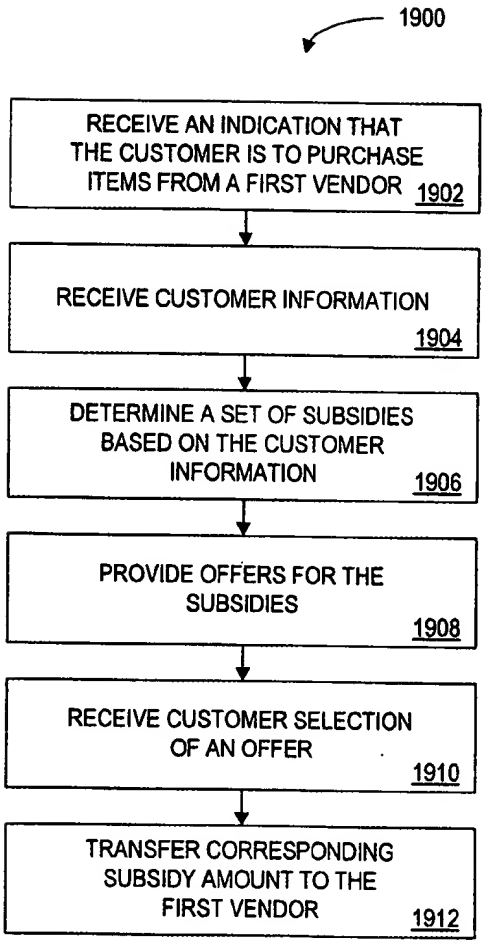

1900
RECEIVE AN INDICATION THAT THE CUSTOMER IS TO PURCHASE ITEMS FROM A FIRST VENDOR 1902
RECEIVE CUSTOMER INFORMATION 1904
DETERMINE A SET OF SUBSIDIES BASED ON THE CUSTOMER INFORMATION 1906
PROVIDE OFFERS FOR THE SUBSIDIES 1908
RECEIVE CUSTOMER SELECTION OF AN OFFER 1910
TRANSFER CORRESPONDING SUBSIDY AMOUNT TO THE FIRST VENDOR 1912

FIG. 19

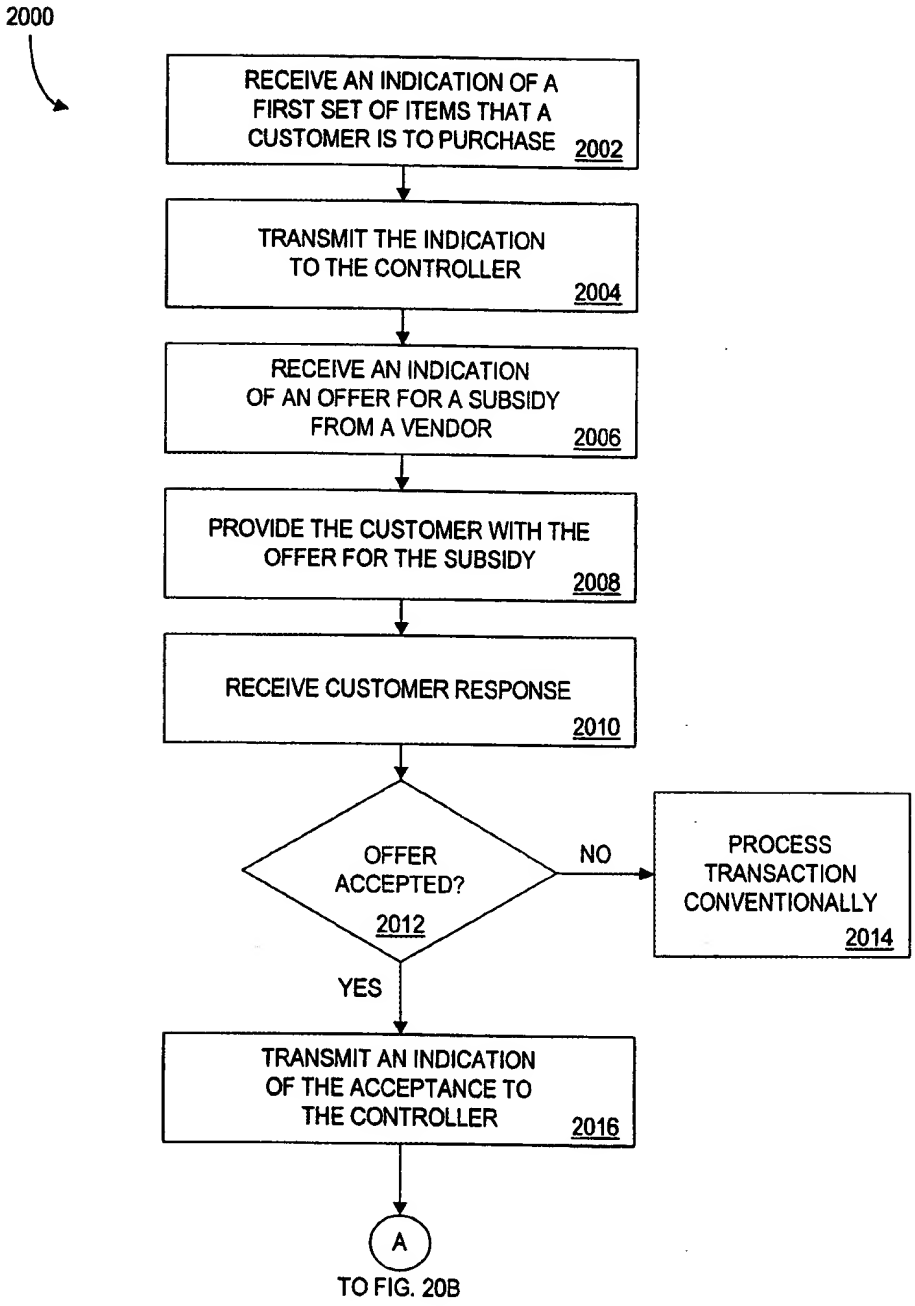

2000
RECEIVE AN INDICATION OF A FIRST SET OF ITEMS THAT A CUSTOMER IS TO PURCHASE 2002
TRANSMIT THE INDICATION TO THE CONTROLLER 2004
RECEIVE AN INDICATION OF AN OFFER FOR A SUBSIDY FROM A VENDOR 2006
PROVIDE THE CUSTOMER WITH THE OFFER FOR THE SUBSIDY 2008
RECEIVE CUSTOMER RESPONSE 2010
OFFER ACCEPTED? 2012
NO
PROCESS TRANSACTION CONVENTIONALLY 2014
YES
TRANSMIT AN INDICATION OF THE ACCEPTANCE TO THE CONTROLLER 2016
A
TO FIG. 20B

FIG. 20A

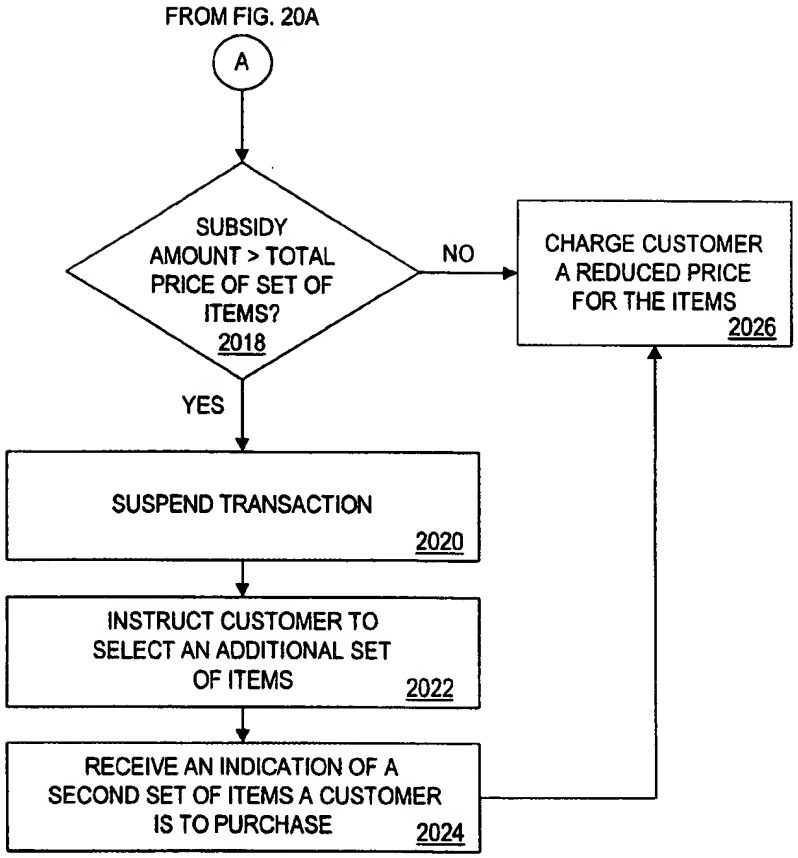

FROM FIG. 20A
A
SUBSIDY AMOUNT > TOTAL PRICE OF SET OF ITEMS? 2018
NO
CHARGE CUSTOMER A REDUCED PRICE FOR THE ITEMS 2026
YES
SUSPEND TRANSACTION 2020
INSTRUCT CUSTOMER TO SELECT AN ADDITIONAL SET OF ITEMS 2022
RECEIVE AN INDICATION OF A SECOND SET OF ITEMS A CUSTOMER IS TO PURCHASE 2024

FIG. 20B

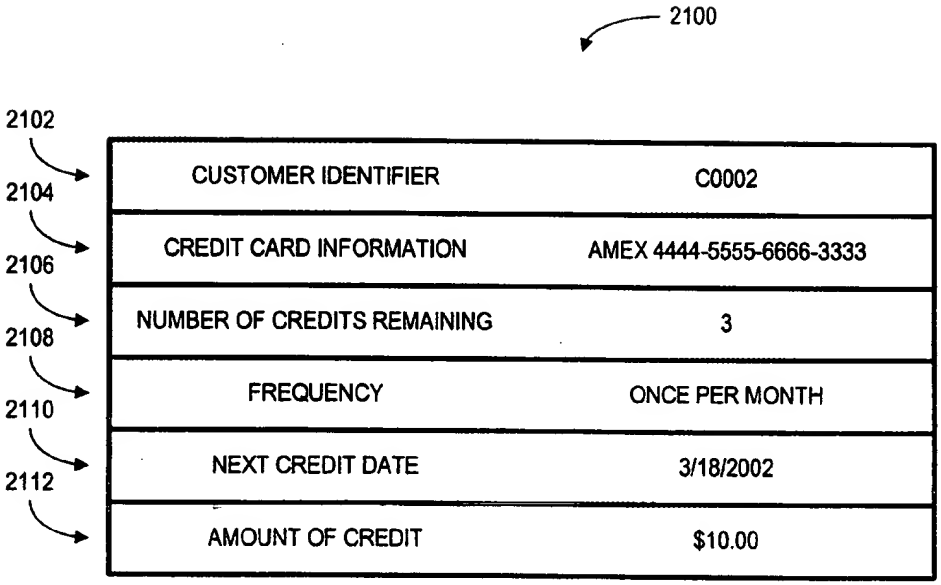

2100
2102
2104
2106
2108
2110
2112
CUSTOMER IDENTIFIER
C0002
CREDIT CARD INFORMATION
AMEX 4444-5555-6666-3333
NUMBER OF CREDITS REMAINING
3
FREQUENCY
ONCE PER MONTH
NEXT CREDIT DATE
3/18/2002
AMOUNT OF CREDIT
$10.00

FIG. 21

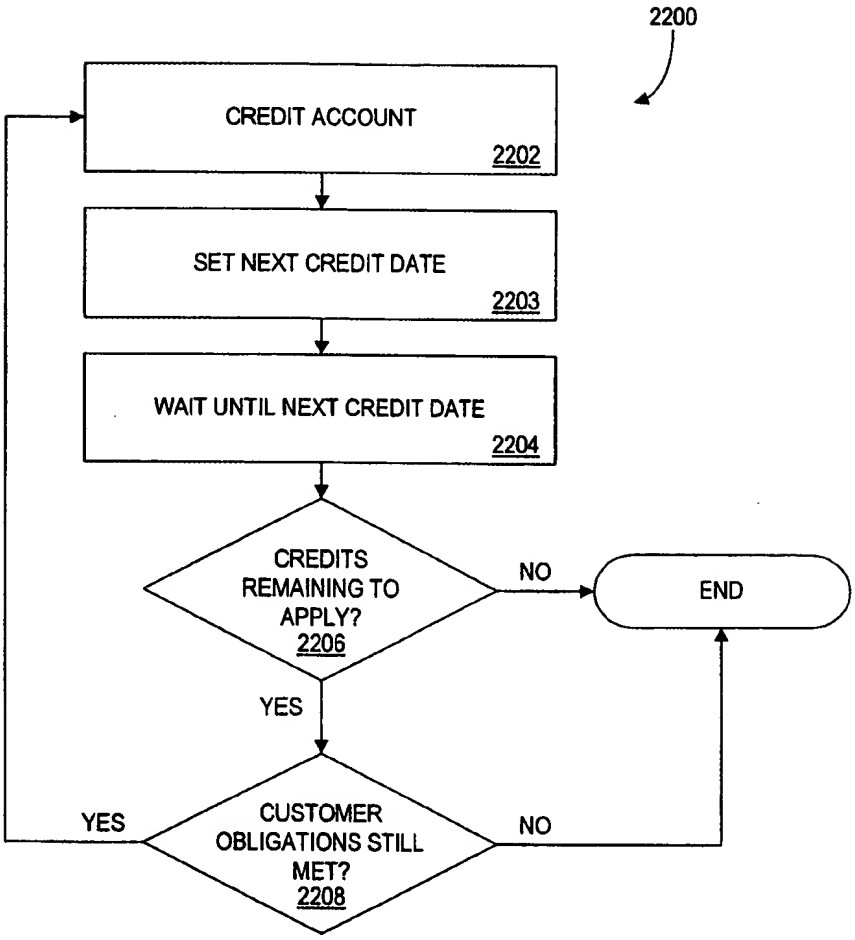

2200
CREDIT ACCOUNT
2202
SET NEXT CREDIT DATE
2203
WAIT UNTIL NEXT CREDIT DATE
2204
CREDITS REMAINING TO APPLY?
2206
NO
END
YES
CUSTOMER OBLIGATIONS STILL MET?
2208
YES
NO

FIG. 22

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/13819

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :G06F 17/60, 17/00
US CL :705/26, 14

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 14, 1, 27 ,16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X<br>-----<br>Y | US 5,434,394 A (ROACH et al) 18 July 1995 Figure 3a, 3b, and 3c. col. 1 lines 50-67, col. 2 lines 48-65, col. 6 lines 1-5, col. 10 | 1, 13, 31, 61-69<br>----------<br>2-12,14 -30, 32-60 |
| X<br>------<br>Y | US 5,570,417 A (BYERS) 29 October 1996, ab. col. 4 lines 27-62 col. 5 | 1, 13, 31<br>61-69<br>----------<br>2-12, 14 -30, 32-60 |
| Y | FICKENSCHER, LISA. American Express Seeks to Mine Its Data on Cardholder Spending Patterns. The American Banker. 24 March 1997. p 20. | 2-12, 14 -30, 32-60 |

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

| | | | |
|---|---|---|---|
| * | Special categories of cited documents: | "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "A" | document defining the general state of the art which is not considered to be of particular relevance | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "E" | earlier document published on or after the international filing date | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "&" | document member of the same patent family |
| "O" | document referring to an oral disclosure, use, exhibition or other means | | |
| "P" | document published prior to the international filing date but later than the priority date claimed | | |

| | |
|---|---|
| Date of the actual completion of the international search<br>16 SEPTEMBER 1999 | Date of mailing of the international search report<br>21 OCT 1999 |
| Name and mailing address of the ISA/US<br>Commissioner of Patents and Trademarks<br>Box PCT<br>Washington, D.C. 20231<br>Facsimile No. (703) 305-3230 | Authorized officer<br>ALLEN MACDONALD<br>Telephone No. (703) 305-9708 Joni Hill |

Form PCT/ISA/210 (second sheet)(July 1992)*

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/13819

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| Y | FICKENSCHER, LISA. Amex to Start Free Rewards Program with Discounts on Merchandise. The American Banker. 18 October 1996 p 10. | 2-12, 14 -30, 32-60 |
| Y | FITZGERALD, KATE. Amex Program Moves Loyalty to Next Level. Advertising Age. 04 November 1996. p 2 | 2-12, 14 -30, 32-60 |
| Y,P | US 5,893,075 A (PLAINFIELD et al) 06 April 1999 col. 4 lines 51-65, col. 6 lines 36-58 | 1-67 |
| Y,E | US 5,918,211 A (SLOANE) 29 June 1999 col. 5 lines 64-67, col. 6 lines 1-11, col. 8 lines 1-50 | 1-67 |

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/13819

B. FIELDS SEARCHED
Electronic data bases consulted (Name of data base and where practicable terms used):

APS, DIALOG
search terms: promotion, rebate, discount, reward, incentive, credit card, online shopping, cashback, application, service provider